2001

An Evaluative Study Of The Walter Panas High School Individualized Senior Experience Program (Wise)

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AN EVALUATIVE STUDY OF THE
WALTER PANAS HIGH SCHOOL INDIVIDUALIZED SENIOR
EXPERIENCE PROGRAM (WISE)

BY

ERNEST J. PIERMARINI

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Submitted in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
Seton Hall University

2001
ACKNOWLEDGEMENTS

It is difficult to dedicate a body of work that has taken so much time to complete. There has been the love and encouragement of family, friends, and colleagues that cheered on every effort. A dedication that culminates one’s highest level of achievement in education cannot simply dismiss where your education begins. Therefore, I dedicate this dissertation to my mother, Mary, and the memory of my father, Pierino, who were my first teachers and raised me to value education and learning. They selflessly gave of themselves both emotionally and financially to assure that my life would be better than what they experienced as immigrants. I also wish to dedicate this dissertation to my wife, Linda, who has patiently awaited the completion of this dissertation. I appreciate her love and understanding of those missed family and social events that I could not attend due to the completion of this project. In addition, I express my appreciation to my sons, Peter and Craig, for their words of encouragement and interest in this pursuit.

Finally, I must acknowledge, Mr. Vic Leviatin, Director of WISE Services, who was an incredible resource of information in the completion of this dissertation. Without him there would not have been a WISE to provide students with a creative and unique opportunity for the high school senior year.
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Chapter I

Introduction

School-to-Work Transition is a comprehensive system of education that allows students the opportunity to connect their learning in the classroom to the needs and demands of higher education and the workplace. It is an effort that touches all students, those bound for four-year colleges and universities, those who plan to attend community or technical colleges, and those who intend to move immediately into the world of work.

The impetus behind this movement began in May 1994, when President Clinton signed into law the School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239). This legislation, in tandem, with the Goals 2000: Educate America Act (Pub. L. No. 103-227), gave life to the movement, and provided funding through grants to school districts and various consortia for planning and implementing School-to-Work models throughout the country.

The School-to-Work initiative reflects a shift in the mission of public education in that educators are expected to assume some responsibility for the economic futures of all students, not only those students who will attend four-year colleges and universities. A primary goal is to make school more meaningful for students by connecting what they are learning in the classroom to real-world and workplace applications.

The Departments of Education and Labor jointly administer the School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239). The law requires that School-to-Work
programs be for all students and that they become part of the K—12-core curriculum. In addition, the legislation requires a commitment from the business and labor communities through the establishment of local partnerships in the design of School-to-Work programs that meet the local needs of students.

The Act also articulated an educational reform that included innovative approaches to classroom teaching, guided learning experiences outside the classroom, and increased career counseling and guidance. The legislation identified three basic components for any School-to-Work program: school-based learning, work-based learning and connecting activities. Through these components working in concert, students are provided with an education that is academically rigorous and relevant with work related experiences.

Education is under pressure to provide the skilled labor force needed for the highly competitive global economy. The highly regarded report of the Secretary of Labor’s Commission on Achieving Necessary Skills (SCANS), What Work Requires of Schools, outlined the basic skills and workplace competencies needed by our labor force in order to compete effectively in the global marketplace.

The SCANS report and others have called for changing instruction through more experiential learning outside the classrooms and more contextualized teaching. Grub (1996) states:

SCANS believes that teachers and schools must begin early to help students see the relationship between what they study and its applications in real world contexts...We believed, after examining the findings of cognitive science that the most effective way of teaching skills is in
“context.” Placing learning objectives within real environments is better than insisting that students first learn in the abstract what they will then be expected to apply...Reading and mathematics become less abstract and more concrete ...when learning is “situated” in a system or a technological problem. (p.536)

The SCANS report linked the demands of employers to the claims of educational reformers. The changing economy requires new skills of its workers, and therefore, new approaches to teaching must be implemented.

The review of the literature supports the issue that students have difficulty in appreciating the relevance of academics to real world application outside of the academic arena. Students are unable to connect the benefits of getting a good education with getting quality employment. School-to-Work is based on the premise that education for all students can be made more relevant and useful to future careers and lifelong learning.

The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) was designed to assist states in building school-to-work systems. Eight states (Kentucky, Maine, Massachusetts, Michigan, New Jersey, New York, Oregon, and Wisconsin) received planning grants, and were awarded the first implementation grants to expand their school-to-work systems. An additional 19 states have since been awarded implementation grants.

New York State has been heavily involved in obtaining funding through the School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) and the Goals 2000: Education America Act (Pub. L. No. 103-227). The funding encourages school districts
and/or educational consortia throughout the state to apply for competitive grants to establish school-to-work programs and improvement plans.

The New York State Learning Standards provides an additional emphasis on school-to-work concepts and standards. The standards were developed and presented in seven individualized booklets (English Language Arts, Social Studies, The Arts, Languages Other Than English, Math, Science, and Technology, and Health, Physical Education, and Home Economics). The final booklet, which weaves all of these standards together, is entitled Learning Standards for Career Development and Occupational Studies (1996). These standards are outlined as follows:

Standard 1: Career Development
Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.

Standard 2: Integrated Learning
Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings.

Standard 3a: Universal Foundation Skills
Students will demonstrate mastery of the foundations skills and competencies essential to success in the workplace.

Standard 3b: Career Majors
Students who choose a career major will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in post-secondary programs. (p. 1)

In order to implement the above learning standards, the Lakeland Central School District has developed several School-To-Work programs and activities throughout the school system. The focus of this dissertation will be to conduct an evaluative study of the high school internship program entitled the Walter Panas High School Individualized Senior Experience (WISE). The study will help determine whether the program
effectively implements the New York State Learning Standards for Career Development and Occupational Studies (1996) # 1, 2, and 3a.

Statement of Problem

As School-to-Work activities and programs are developed and implemented throughout the Lakeland Central School District, it becomes necessary to evaluate which activities and programs could serve as models of replication for its schools, and which activities and programs could be modified in order to deliver the learning standards effectively.

This dissertation will provide an evaluative study of the Walter Panas High School Individualized Senior Experience (WISE) a capstone School-to-Career program for seniors. WISE affords seniors the opportunity to explore and develop their individual potential beyond the classroom as interns in a workplace setting of their choice. Teachers acting as school-based mentors work to help students connect their chosen field experience with the classroom. Ultimately, students will be able to gain insight into the activities and duties involved in a career path they may wish to pursue.

This dissertation will focus on the question: What influence has the Walter Panas High School Senior Individualized Experience (WISE) program had on the selection of career choices and/or college majors by its student participants in the graduating classes of 1996, 1997, 1998, and 1999 as compared to students who did not participated in the program (non-participating students)?
Purpose of Study

The purpose of this dissertation is to determine the influence the Walter Panas High School Individualized Senior Experience (WISE) program has had on the selection of career choices and/or college majors of its student participants in comparison to non-participating students in the graduating classes of 1996, 1997, 1998, and 1999. The findings of this study will provide an in-depth program evaluation that will lead to program improvement and replication in other schools. Based on questionnaires, telephone interviews, focus group discussion and student journals, the data compiled will yield answers to the following research questions:

1. What impact did the WISE program have on its student participants regarding their decision making about their future career plans and/or college majors?

2. What impact did the programs at Walter Panas High School have on non-participating students regarding their decision making about their future career choices and/or college majors?

3. What were the most essential goals accomplished by the WISE program from the perspective of its participants (students, school-based mentors, work-based mentors)?

4. What skills and benefits did students derive by their participation in the WISE Program?

5. What were the satisfaction levels achieved by the WISE program from the perspective of its participants? (students, school-based mentors, work-based mentors, parents/caregivers)?

6. What recommendations can be made to the WISE program in order to improve the effectiveness of the Program for its student participants?
Rationale for Study

The fact that two-thirds of all high school graduates go on to higher education directly after school is a cause of national pride. However, only half ever graduate and of those who earn a bachelor’s degree, one third are underemployed. In addition, one of the fastest growing groups in higher education is known as “reverse transfers”. These individuals hold bachelor’s or even graduate degrees and enroll in one and two year certificate or associate degree programs in occupational and technical areas in order to qualify for jobs. (Gray, 1996)

Hess (1997) explains that United States schools do a decent job of helping students prepare for and connect to colleges. However, he adds students “know little about work, have no clear idea about what they must do to enter a particular career or occupation, and do not know what might be expected of them at work” (p. 2).

The advocacy and study of the effectiveness of school-to-work strategies for students who are college-bound has been a focus of Thomas Bailey and Donna Merritt, from the Institute on Education and the Economy Teachers College, Columbia University. Bailey and Merritt (1997) support the premise that school-to-work is for all students and can effectively deliver curriculum for the college-bound. According to Bailey and Merritt (1997), they have identified the three basics of school-to-work as authentic teaching and learning, guided educational experiences outside the classroom, and career and interest exploration.

The high college dropout rate is one of the least discussed problems in the country’s education system. According to the American College Test Program Survey (Bailey & Merritt, 1997), even though college enrollment rates are at an all time high,
33% of all college freshmen enrolled in a BA/BS programs drop out after their first year. Bailey & Merritt (1997) state:

Thus, there is a tremendous amount of wheel spinning and wasted effort in college. This suggests that the current secondary school system could in fact do a much better job of preparing students for college, or perhaps help them decide to try something other than a four-year college or university. One of the central goals of the school-to-work strategy is to help students think systematically about their goals and aspirations. (p. 8)

The WISE program was specifically created and intended to provide seniors with the opportunity to explore a career by participating in an internship of their choice. The WISE internships provide students with the opportunity to practice skills and apply theory learned in the classroom to actual work situations. Students also learn and develop new skills, acquire professional experience prior to graduation from high school, and in the process develop positive work habits and attitudes.

Whatever ultimate choices students may make—work or college—the choice will be based on the knowledge gained from the WISE program. The choice will be focused and provide direction for students in the pursuit of their goals.

**Definition of Terms**

**All Students**

Both male and female students from all backgrounds and circumstances (School-to-Work Glossary of Terms, p. 3)
Career Academies

Special focus programs in which academic and vocational instructors collaborate around a single theme such as: the arts, science and technology, electronics, business, etc. Some career academies are schools within schools while others encompass an entire school. (School-to-Work Glossary of Terms, p. 7)

Career Awareness

Activities that are designed to make students aware of the broad range of careers and/or occupations in the world of work, including options that may not be traditional for their gender, race or ethnicity. (School-to-Work Glossary of Terms, p. 9)

Career Choice

The act of selecting a career major, a lifetime pursuit, a profession, or an occupation. (School-to-Work Glossary of Terms, p. 9)

Career Development

The process through which an individual comes to understand his or her place in the world of work. Students develop and identify their careers through a continuum of career awareness, career exploration, and work exposure activities that help them to discern their own career path. (School-to-Work Glossary of Terms, p. 10)

Career Exploration

Activities designed to provide some in-depth exposure to career options for students. Activities may include the study of career opportunities in particular fields to identify potential careers, writing individual learning plans that dovetail
with career majors offered at the high school level, or review of local labor market information. (School-to-Work Glossary of Terms, p. 10)

**Career Major**

A coherent sequence of courses or field of study that prepares a student for a first job, integrates academic and occupational learning, integrates school-based and work-based learning, establishes linkages between secondary schools and post secondary institutions, and results in the award of a high school diploma or its equivalent such as a certificate, alternative diploma, or skill certificate indicating mastery. (School-to-Work Glossary of Terms, p.13)

**Career (Job) Shadowing**

An activity that provides students with the opportunity to investigate a potential career area through observation at a work-site. (School-to-Work Glossary of Terms, p.32)

**Connecting Activities**

Programs or human resources that help link the involvement of employers, schools and students. Such activities include matching students with work-based learning opportunities, providing inservice training for counselors, teachers, and mentors; helping with the placement of students in jobs, further education and/or training; and a follow-up on students progress after graduation. (School-to-Work Glossary of Terms, p.18)

**Cooperative Education**

Links school with paid on the job experiences related to as student’ career choice. The program is administer by the school and involves teachers and employers working
closely together to facilitate student learning and job performance. (School-to-Work Glossary of Terms, p. 20)

**Influence**

The effect of the activities and internship experience provided by the WISE Program has had on the decision making of student participants regarding the confirmation, modification, and/or rejection of their career choices/college majors in comparison to students who did not participate in the WISE Program.

**Internship**

An experience in which a student is assigned to an area of concentration or a specific project for an agreed upon-time period under the supervision of a work-based mentor. Students experience some on-the-job training in a mentoring relationship. Internships are usually short-term, unpaid work experiences.

(School-to-Work Glossary of Terms, p.31)

**Lakeland Central School District**

The district is located in the northwest corner of Westchester County in the State of New York. It is the largest suburban school district in the county. The district serves the educational needs of approximately 6,450 students, who live in six different towns spread over two counties (Yorktown, Cortlandt, and Somers in Westchester County and Carmel, Philipstown, and Putnam Valley in Putnam County). (Lakeland Central School District Calendar, 2000-01, p. 1)

**Local Partnership**

A local entity that is responsible for local School-to-Career (Work) programs consisting of representatives of education, business, and post-secondary institutions.
(School-to-Work Glossary of Terms. p. 38)

Non-Participating Students (Alumni)

Students who did not select the WISE Program during the academic years from 1995-96 through 1998-99.

Satisfaction

The fulfillment of the expectations of the WISE Program from the perspective of its program participants (students, school-based mentors, work-based mentors and parents/caregivers).

SCANS (Secretary’s Commission on Achieving Necessary Skills)

This commission was convened in February 1990 to examine the demands of the workplace and to determine whether the current and future workforce is capable of meeting those demands. (School-to-Work Glossary of Terms, p. 45)

School-to-Career (Work)

This title is used interchangeably when mentioning and discussing School-to-Work programs.

School-based Mentor

A certified professional at the school chosen by the student, who provides the student with guidance and support, in the WISE program. (WISE Handbook, p. 3)

School-based learning

Instruction at the school that provides students with career awareness, exploration and counseling, and instruction in a career major as identified in a student’s plan.

(School-to-Work Glossary of Terms. P. 50)
**Student Attitudes**

A state of mind or feelings a student has regarding a topic, a project, or issue.

**Student Participants (WISE Alumni)**

Students who participated in the WISE Program during the academic years from 1995-96 through 1998-99.

**Walter Panas High School**

The high school is located in the town of Cortlandt at the west end of the Lakeland Central school District near the Hudson River city of Peekskill. The school is comprised of approximately 1050 students, 75 professional educators, and 30 additional support staff. According to the Walter Panas High School Profile (1999), approximately 80% of the graduating senior class enters post-secondary institutions.

**Westchester-Putnam School-to-Careers Partnership**


**WISE**

The acronym used for the Walter Panas High School Individualized Senior Experience. The program provides seniors in their second semester the opportunity to participate in an internship in a career area of interest. (Lakeland Central School District High School Program of Studies, p. 13)
Work-based learning

Instruction at the work-site that provides students with a planned program of workplace experiences and the chance to master a range of skills with a career cluster.

Work-based Mentor

An employee at the workplace who provides students in the WISE program with the workplace experience. (WISE Handbook, p. 3)

Limitations of Study

Although school-to-work programs and reform strategies enjoy widespread support, many parents, teachers, educational administrators and counselors, college admission personnel, and employers remain skeptical about their potential as a means to prepare students for college and/or the workplace. Listed below are some questions that have been raised regarding the School-to-Work model that will not be addressed by this dissertation:

1. Is this just another vocational education program? How does it differ?
2. How can students make career decisions in elementary schools?
3. Is a four-year degree the only key to a good paying job?
4. How does one gain the support from parents?
5. How does one respond to the critics of School-to-Work programs who feel that School-to Work is a government plot to usurp a parent’s input in their child’s education?

School-to-Career Transition is an important aspect of education in the Lakeland Central School District. Through its membership in the Westchester-Putnam School-to-
Careers Partnership, the awarding of grants from the Goals 2000: Educate America Act (Pub. L. No. 103-227) and School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239), Lakeland has implemented many facets of School-to-Career programs, as well as expanding staff development activities.

In its elementary schools, teachers have developed model project based learning activities to connect academics and state learning standards to real world and workplace applications. The middle school has provided students with career (job) shadowing experiences in the community. The high schools have developed an interdisciplinary project based learning activity at a work-based learning site, and a senior internship program that has become quite popular.

This dissertation will be limited to the WISE program at Walter Panas High School, and will not evaluate or address any of the other School-to-Career programs currently in place in the district.
Chapter II

Review of Related Literature

The American educational system has focused most of its efforts on the twenty-five percent of students who will attend college and complete a four-year degree upon graduation from high school. This spotlight on the college-bound student has created barriers for those who choose to enter the workforce directly from high school. These non-college bound students have received little guidance in finding jobs and little training for specific occupations. Comparative studies indicate that the United States was the only major industrial country that did not have a well-defined and supported system to assist students who were making the transition from school to work (Dutton, 1995, p. 7)

America’s economic success during the twentieth century is attributed to its ability to mass-produce products for international markets. Since these production systems, goods, and technology rarely changed, the education system has been successful for a sustained period of time in providing a well-trained workforce. However, the widespread changes in the workplace of the future demand dramatic reforms in our educational system. The dynamic workplace has caused serious issues for the preparation of our students for the future workplace. In order for the United States to maintain prominence in the international community, it must adequately train a skilled workforce that can compete in the global economy.
The School-to-Work model seeks to reform education on a systematic K-12 basis and build effective links between school and the world of work. Its primary goal is to make school more meaningful for students by connecting what they are learning in the classroom to real-world and workplace applications.

School-to-Work programs provide the mechanism to enable students to make the transition from high school into post-secondary education and/or work. It is an effort that touches all students—those who are bound for four-year colleges and universities, those who plan to attend community or technical colleges, and those who intend to move immediately into the workforce. It asks educators to assume some of the responsibilities for the economic future of all students.

The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) was passed by Congress to address the concern of policy makers to encourage the development of a school-to-work system. Jointly administered by the Departments of Education and Labor, the Act requires a K-12-core curriculum system that is for all students. In addition, it requires a commitment from the business community to join in this systematic educational reform effort.

Even though the School-to-Work effort and model has merit, concerns have been raised regarding implementation. Listed below are some questions that have been raised regarding School-to-Work:

1. Is this just another vocational education program? How does it differ?
2. How will we gain support from the academic faculty?
3. How will we solicit and maintain support from the business community?
4. How are students to make career decisions in elementary schools?
5. How do we dispel the myth of the four-year degree as a key to a good paying job?

6. How do we gain the support from parents, who fear that this is not an end to their child's education?

7. How do we answer critics that think that School-to-Work is a government plot that will interfere with local control of education and usurp a parent's input in their child's education?

This interest at the local, state, and national levels to improve the academic and occupational options available to all students has emerged as a focus of program and policy innovation. This chapter will discuss the school-to-work effort in the context of the educational reform effort.

**Educational Reform**

A constant concept in American education is the word reform. Ever since 1957, when the Russians launched Sputnik into orbit, there has been a consistent plea for educational reform to meet any challenge on a national and/or international level. In 1957, there was the call for school to place more emphasis on math and science. Other reform efforts focused on the needs of the disadvantaged and handicapped, equity in relation to race, ethnicity, and gender, "back to basics," and programs for the gifted and talented.

In 1983, the National Commission on Excellence in Education published *A Nation At Risk*, drawing comparisons of the poor educational performances of American students to their European and Northeast Asian counterparts. *A Nation At Risk* attributed the poor performance of American students to a lack of discipline, low standards, and
scant attention to academic basics. Hudelson (1992) states that the latest education reform movement appears to be focused on results rather than methods.

Several authors have characterized this most recent school reform as having unique "waves" of reform. Michaels (1988) indicates two distinct waves of reform. The first wave was concerned with raising standards, increasing accountability, lengthening the school days and year, and increasing rigor in American public education. According to Michaels, a different agenda beginning about 1988 fueled the second "wave" of reform:

This agenda included: (1) the school as a decision-making unit; (2) the development of a more collegial participatory environment both staff and students; (3) a more flexible use of time; (4) increased personalization of the school environment to establish trust, high expectations, and sense of fairness; (5) a school curriculum that focuses on students' understanding what they learn—knowing why as well as how; and (6) creating an emphasis on higher order thinking skills for all students. (p. 4)

Futrell (1989) presents that there are four waves of reform, with the fourth wave just beginning. Her first wave parallels that of Michaels. Her second wave begins to focus on local schools and teachers to lead the improvement effort. Decentralization became the key concept as well as collaboration by teachers, principals, superintendents, school boards, parents, business and community. Futrell (1989) states, "The second wave of reform is based upon the realization that if education were to serve economic and social revitalization, it ought to be initiated by educators, not legislators." (p. 12).
Mirman (1988) refers to the first wave of reform as a concentrated effort to improve on what was already being done. She explains that the second wave attacked the very structure of education, focusing on whom we teach, and how we teach. In 1987 the term "restructuring" began to appear in the literature. It has been used to describe second wave reforms.

In summary, the reform movement in education in the eighties has been a shift between legislating how much should be done and deciding how should it be done. In order to achieve the desired changes, the emphasis was on experimentation and application of numerous strategies designed to achieve those changes. It focused primarily on improving the skills of the college-bound youth, and little to enhance school-to-work transition of the non-college bound youth. However, the recently published report by the National Commission on the High School Senior Year, *The Lost Opportunity of the Senior Year: Finding a Better Way* (2001), indicates that education serves purposes other than making a living. The report indicates that everyone must be comfortable with the scientific method, quantitative tools, and technology, as well as having a sense of history of the United States and the world "...understanding democratic values, and an appreciation for how the arts and literature explain the human condition and expand its possibilities" (p. 5).

The future of educational reform is summarized by this report. In conclusion, education needs to prepare all students to live and prosper in increasingly complex and interdependent world that will require them to continue to grow, change and be life-long learners.
Reports on School-to-Work Reform

According to the William T. Grant Foundation, who published The Forgotten Half in 1988, “Our economy is being damaged and more importantly, young lives are being damaged by our collective failure to help young people make a smoother transition from school to work.” (p. 39). This quote provides an example that set the stage for the school-to-work movement.

The Forgotten Half warned that, “By subsidizing youth who attend college at seven times the rate of those who plan to enter the job market full-time upon graduation from high school, the United States is jeopardizing its workforce and its economic well-being.” (p. 39). The report calls for the training of all students, because more than half of all American high school graduates will not complete college.

The next significant report on school-to-work reform was America’s Choice: High Skills or Low Wages prepared by the Commission on the Skills of the American Workforce in 1990. It warned that low productivity caused by poor school-to-work transition, “is leading the United States down a road to economic ruin.” (p. 2). The report concluded that America would become a second-rate economic power unless businesses are able to boost their productivity. Boosting the productivity growth of American business cannot and will not happen unless schools do a better job of preparing young people for work (Wilcox, 1991).

According to Wilcox (1991), an American company has three choices to be able to compete with foreign companies. These choices are “.... (1) cut wages by two-thirds; (2) cut the number of employees by two-thirds while maintaining the same production capacity; and (3) become 300% more productive.” (p. 33). Historically, American
businesses have chosen the first two methods. Option three is promoted in *America's Choice: High Skills or Low Wages*. However, the creation of a highly productive workforce can succeed only if businesses change the way they work and develop a better system for preparing entry-level workers. This would mean that non-college bound youth must have more formal training options than they have now.

In 1991, the Labor Secretary Commission on Achieving Necessary Skills (SCANS) defined the work-readiness skills that schools should teach and test: three foundation skills (basic skills, thinking skills, and personal qualities), and five workplace competencies (resources, interpersonal skills, information, systems, and technology) needed by all students entering today's workforce. These SCANS Skills require totally different teaching methodology and a need to reinvent schools.

The Bush Administration's *Job Training 2000* was a proposal to reorganize the entire vocational education/job training process. Skill Centers, which were also a recommendation of *America's Choice*, would serve as a central point of entry into the vocational education/job training system. A challenge was issued to American businesses to help fund the new schools for the new century. In 1992, business responded with the formation of the New American Schools Development Corporation (NASDC), an independent non-profit organization to fund the design of these new learning environments. NASDC's goal is to give every child the opportunity to reach world-class standards in the five core subjects of English, math, science, history, and geography (Blount, 1992, p. 23). The rationale behind this effort is one of the basic tenets of the School-to-Work reform effort: business has a unique responsibility in education because it knows the workplace skills needed to keep America competitive in the next century.
Because business reaps the benefits of a good education system, it suffers when graduates are not prepared for work.

In a recently published report by the National Commission on the Senior Year, *The Lost Opportunity of the Senior Year: Finding a Better Way* (2001), emphasizes the importance of all students having high levels of literacy and logic and the capacity to think critically in order to survive in the future workplace. The report states that "Knowledge and skills, schools and education are becoming to economic growth in the 21st century what steam, oil, mineral deposits, and manufacturing processes were to progress in a previous time" (p. 5). If schools do not change to meet the demand for higher levels of skills and education for all students, about half of our population will prosper and the other half will struggle. The report summarizes the severity of this issue with the following statement:

If we go along as we have been, about half our people, perhaps two-thirds will flourish….Reaping the benefits of economic growth grounded in a high-tech, service-base economy; they will enjoy the rewards of the Information Age. The other one-third to one-half of our people is more likely to flounder. Poorly educated, worried about their place in rapidly changing world. Lacking knowledge and skills, they will struggle to get by in dead-end high-turnover jobs. The key difference between the two groups will be the level and quality of education available to them. (p. 6)
The Academic Middle—The Neglected Majority

"In the average American high school, students prepare for college or work on one of two tracks: college prep (47%) or vocational education (12%). The remaining 41% are headed on the track to nowhere certain on the broad general track." (Hudleson, 1994, p.22). Lewis (1993) laments that educators in high school and district offices need to stop deluding themselves into believing that their main responsibility is to prepare students for careers that require a bachelor's degree. Over three-fourths of all jobs in this country do not require a baccalaureate degree (Smith & Rojewski, 1992). Lewis (1993) argues that only about 25% of the young people under the age of 29 have earned bachelor's degrees. Yet, high school counselors spend only about 30 percent of their time helping students choose careers to find jobs (Lewis, 1993). Mendel (1994) refers to these young people as the "neglected majority," those students who enter but do not graduate from a four-year college.

According to Hager (1994), too many young people simply drift through high school and do not settle on a career path until their thirties. Paul Osterman of M.I.T. (cited in Lewis, 1993) explains that young people experience long periods of unemployment; with one-third of all high school graduates unable to find steady employment by the time they turn thirty. Firms that pay the highest wages and offer the most opportunity for promotion and training do not typically hire high school graduates. And, of the nation's largest employers, fewer than one in ten hire new high school graduates (Mendell, 1994).

As previously indicated in the W.T. Grant Foundation report, the original impetus for this reform was a growing concern during the 1980's that America's youth were not
prepared for the rapidly changing world of work, a view that gained support from well-publicized complaints by business about the quality of many of their applicants (Bassi 1996; Smith 1996). At first, the school-to-work strategy was seen as appropriate for the "non-college bound" or the "forgotten half." Bailey and Merritt (1997) researched that it was this middle half—those who were not headed for college but who did not have such serious problems that had been forgotten.

Bailey and Merritt (1997) state:

According to this view, the American education system served the college-bound system well (the "top quarter") and while there was still much to be done for students who faced serious economic, social, and education problems (the "lower quarter), at least this group had not been "forgotten" since a quarter century of social policy had attempted to address the educational barriers they faced. (p. 1)

Bailey and Merritt (1997) continued by indicating the view of the W.T. Grant Foundation (1988) and the Commission on Skills in the American Workforce (1990) that "The problems with education of the middle half had particularly serious economic consequences since these were the individuals who actually carried out the work in the core manufacturing and service industries." (p. 1)

School-to-work programs have tended to focus on developing a strategy to serve this forgotten half. A recent Department of Labor (1995) report stated that current school-to-work programs tend to recruit students from the "middle ... young people who probably would not enroll in college and do not have severe academic or behavioral
problems" (p. 17).

The academically talented, who receive honors diplomas, take advanced placement classes, graduate academically prepared, and head off to the prestigious colleges, do not cause concern. The academic middle causes concern when their post secondary plans and their academic records, along with their labor market prospects suggest that most of these young people are seriously adrift. (Gray, 1997).

As the authors of The Shopping Mall High School (1985, as cited in Gray, 1996) observed:

...those in the academic middle have become the "unspecial". Being neither gifted nor talented, they do not fit into the legally defined categories and have therefore, received little attention and have few advocates. Despite the fact that they are now found primarily in the college prep programs, they remain invisible because they are not in AP or honors classes. All too often teachers treat them the way coaches treat the third- and fourth string athletes on their teams: they receive little attention, zero recognition, and are more tolerated than welcomed. (p. 534)

The academic middle had been led to believe by their parents and teachers that there was only one way to be a success "... one way to win in the game of life ... to get a four-year degree that will open doors to professional or managerial positions." (Gray, 1997). The majority of students in the academic middle who take this advice usually fails.

Gray (1997) laments:

Of those who beat the odds and graduate, one-third or more will end up in
jobs they could have obtained without a four-year college degree. The cost of this folly—both financial and human—are staggering for students, their parents, and the nation. It is time to challenge the one-way-to-win mentality that pervades our schools and nation. Contrary to the conventional wisdom, there are other options for higher education that makes a lot more sense for many teens. (p. 528)

According to the National Center for Education Statistics (1995) of that year's high school seniors, 95% planned to continue their education, 84% said that they planned to get at least a four-year college degree, and 33% had already decided to go on to graduate school.

According to the American Council on Education's annual survey of freshmen entering college (1992) the prevailing viewpoint of students to matriculate is to be able to get a better job. The expectations of what a college degree can deliver may be one-sided and borders on naïveté.

According to the NCES study (1995) 50% of all males and 69% of all females expected to be employed in professions by the age of 30. Only 6% aspired to be managers or technicians; only 3% of the males and less than 1% of the females aspired to careers in high-skill/high-wage, non-professional technical occupations.

Gray (1996) states:

But is the pursuit of a four-year college degree realistic for 85% of all graduating seniors? Can even the optimistic among us hope that the economy will generate enough professional work to employ two-thirds of all women? In particular, how realistic is this plan for most of those who
graduate in the academic middle of their high school class? When one examines the data, it would seem not very realistic at all. (p. 529)

Advisors guiding teens along this one-way-to-win pathway of matriculating in a four-year college are making four assumptions: (1) that most students graduate from high school prepared to do legitimate baccalaureate-level work; (2) that most of those who begin a baccalaureate program will graduate; (3) that most of those who graduate will find jobs that they could not have obtained without a degree, and (4) that the whole process is benign; individuals do not get hurt in the process even if they fail. A study of the data suggest that none of these assumptions is correct. (Shelly, 1992)

According to the American Council of Education (as cited in Bailey, 1996), 90% of all private and 95% of all public four-year colleges schedule remedial classes. The numbers of students typically range from 40% to 70% of entering freshmen. Gray (1996) states, "It is important to note that being required to take remedial courses is a powerful predictor of both dropping out of college and of defaulting on student loans." (P. 530).

Among freshmen entering NCAA Division I universities in 1988, slightly more than half (57%) had graduated six years later. In states with high post secondary matriculation rates, the college dropout rate can run as high as two-thirds. Other than those who fail to return between the first and second semesters, one-third of all freshmen who drop out are reported to leave during the first three weeks. (Gray, 1996)

Previously as stated by the NCES annual freshmen survey, student’s goal and primary purpose for going to college is to get a better job. According to a U.S. Department of Labor (1992) projections through the year 2005, at least one third of all
graduates of four-year colleges will not find employment commensurate with their education. As Gray (1996) reports, "The reality is that since the 1950's only around 30% of all jobs required a four-year degree and only 20% of all employment has been in the professional ranks. These ratios are not predicted to change in the future" (p.530).

Muse (1994) states:

There is a great faith—perhaps hope—that the labor market demand for individuals with baccalaureate or graduate degrees will increase to accommodate the increasing percentages of workers who now hold these credentials. But, as growing numbers of parents are discovering when their children graduate from college only to move home unemployed, this faith is best naïve optimism. (p. 147)

Shelly (1994) reported the remarks of one female college student whom he interviewed, which seems to bring clarity to the situation:

It's all a game. We know there are no jobs, but it is what our parents want us to do, and there is nothing else to do anyway, so we play the game. We know most of us will not get jobs. (p.16)

Does this support the assumption that graduates will find jobs that could not have been obtained without a degree?

The celebration that the two-thirds of all high school graduates go on to higher education directly after high school is a cause of pride. However, this elation over baccalaureate education seems misplaced when the data suggests that only half ever graduate, and of those who earn a bachelor's degree one third are underemployed. In addition, one of the fastest growing groups in higher education is known as "reverse
transfers*. These individuals hold bachelors or even graduate degrees and enroll in one and two year certificate or associate degree programs in occupational and technical areas in order to qualify for jobs (Gray, 1996).

Let alone the investment of time, more costly is the investment of money and the mounting paralysis of debt. Forty-eight percent of all students at all public colleges and 70% of those attending private institutions receive financial aid that almost always includes student loans. As Gray (1996) states, "It is sobering to remember that the resulting student debt is not limited to those who actually graduate; the majority of college dropouts end up with debt from student loans as well" (p.531).

Eck (1993) indicates:

But dollars are only one cost associated with the baccalaureate game; equally worrisome are the human costs of widespread humiliation, depression, and alienation of the nation's youth.... Holders of four-year degrees are not exempt: growing numbers of them are experiencing the humiliation of being employed in jobs they could have acquired right after high school. And humiliation can quickly turn into depression when the student loan repayment schedule arrives. (p.38)

Does this support the assumption that individuals do not get hurt in the process even if they fail?

Thomas and Gray (1992) provide suggestions for other ways for students to win, which is basically to provide alternatives that make good economic sense. They focused on higher education at the certificate or associate's level, "which can lead to careers
that provide lifetime earnings equal to or greater than those earned by four-year college graduates" (p.70). The emergence of the technical workplace and the reduction in the number of middle management positions indicates the end of an era, when a bachelor's degree was the sign of an individual's potential.

Rubenstein (2000 b) indicates that until 1960 more than one-third of all the production jobs in the United States were held by high school dropouts. There was a large number of blue-collar jobs available that paid attractive wages and benefits that enabled workers to support their families, take vacations, and provide their children's education. Those jobs no longer exist in today's information-based economy. This new economy requires technical workers that have higher levels of education beyond high school. In fact, Murnane and Levy (1998) concluded that major corporations exhibited a common set of hiring standards. These "new basics skills" include the ability to read at high levels, elementary algebra, ability to use technology, communicate effectively, and collaborate with others from diverse backgrounds.

Gray (1996) provides insight regarding this rationale by presenting a hypothetical example:

.... an individual who graduates with a bachelor's degree in the liberal arts.

This person may well displace a high school graduate from a low-skill/low wage sales job at the GAP but such a person will not displace a skilled manufacturing technician, a medical technician, or an electrician. (p.532)

In addition, researchers from the Department of Labor have concluded (1995), that the lifetime earnings of individuals who work in technical occupations will exceed the earnings of college graduates, with the exception of those who are successful in finding
work in the professional and managerial areas. It can be concluded through the research that the various authors are providing recommendations to change the guidance provided to students and parents, change the curriculum and instructional methods, and change the attitude of educators towards the students who occupy the academic middle.

**Contextualized Learning—Road to Relevancy in Instruction**

Although school-to-work programs originally address those students who fall in the academic middle, many advocates propose and emphasize that school-to-work programs and strategies can benefit all students across the academic spectrum. School-to-work programs stress the use of contextual, experiential learning in the delivery of academic instruction for all students.

For the most part, schools tend to treat students as passive learners. When students are treated as passive learners, they are not afforded the opportunity to engage in choice judgment, control processing, and problem formation (Berryman, 1992). Passive learning places the control of learning with the teacher. It makes the learner depend upon the teacher, thereby minimizing the confidence one develops when one creates meaning of one's own learning. Passive learning undercuts the development of higher order thinking skills and creates motivational issues.

Research provides evidence that contextual learning enhances learning, even though schools often teach skills and knowledge outside of their context. Therefore, there is an absence of opportunity for the student to apply the knowledge they have learned. Parnell (1996) indicates that brain research has shown that the need for developing connections is
rooted in the basic function of the brain itself. When one teaches in context, he or she teaches in accordance with the way the human brain operates, which is to search for connectedness. Simply stated, teaching in context and learning in context provides meaning to learning.

If an individual experiences something that connects with a previous experience, that experience will tend to be retained and something will be learned. Parnell (1996) proposes that the reverse is true for experiences that don’t connect or provide meaning. He states, “Is it any wonder that one-fourth of the public school students do not complete their high school education? Perhaps they drop out because their brains will not allow them to repeat meaningless learning over and over again” (p. 20).

Effective instruction motivates students to connect the content of knowledge with the context of application. Parnell (1996) argues:

Many classroom teachers have discovered the power of contextual teaching. However, this concept has eluded many policy makers and administrative leaders….reams of position papers on longer school days and years; site-based management, more achievement tests and better assessments….will not make much of a difference in what students know and can do. The difference will be made when classroom teachers begin to connect learning with real life experiences in new, applied ways and when education reformers begin to focus on contextual teaching and learning for meaning. (page 20)

The SCANS report and others have called for changing instruction through more experiential learning outside of classrooms and more contextualized teaching. Grub (1996) states:
SCANS believes that teachers and schools must begin early to help students see the relationship between what they study and its applications in real-world contexts. We believed, after examining the findings of cognitive science that the most effective way of teaching skills is "in context." Placing learning objectives within real environments is better than insisting that students first learn in the abstract what they will then be expected to apply. Reading and mathematics become less abstract and more concrete when they are embedded in one or more of the competencies; that is, when learning is "situated" in a system or a technological problem. (p.536)

The SCANS report linked the demands of employers to the claims of educational reformers. The changing economy requires new skills of its workers, and therefore new approaches to teaching must be implemented.

The School-to-Work approach is envisioned as "a systematic, comprehensive, community-wide effort to help all young people (1) prepare for high-skill and high wage careers, (2) receive top quality academic instruction, and gain the foundation skills to pursue post-secondary education and lifelong learning"(Halperin, 1994, p.4). The following assumptions support this broad vision for school to work as Ryan and Irmel (1996) state:

Young people should have active not passive, learning experiences. Most students learn best in real world contexts; therefore, the workplace, community, home and neighborhood should all be viewed as places to learn. Demonstrating competence should be the cornerstone of school-to-
work programs, requiring modification of time-based structures of most high schools. Caring successful adults should serve as mentors, role models, and coaches to students. Research reveals that this support is critical to young people's success. ... young people tackle complex, authentic tasks by working within a community of learners under expert guidance. (p. 24)

There has been no single school-to-work model that has been universally accepted. It is recommended that systems that have worked in an educational organization should continue and include the components of school-based learning, work-based learning, and the all important connecting activities that tie these two learning pieces together. Ryan and Irmler (1996) identify several broad characteristics of successful school-to-work systems:

1. Employer involvement to provide paid or unpaid work experience and structured worksite learning.

2. Integration of academic and vocational learning that includes applied teaching.

3. Coordination between and integration of school and workplace learning.


5. Articulation between high school and post-secondary programs.

6. Adequate funding and other resources.

7. Training and staff development for teachers and worksite supervisors. (p. 13)
As this reform strategy is promoted, there has been some resistance to its implementation. Goldberger and Kazis (1996) found that teachers in academic disciplines feared that moving toward applied, project based curriculum will make it impossible to cover the required curriculum. Vocational education teachers saw a threat to their jobs by being asked to add academic rigor to their courses. Old fears returned that an increased focus on occupation-oriented learning might compromise academic standards and achievement.

On the contrary, school-to-work supports some of the most promising and energetic new reform movements within public education. Goldberger and Kazis (1996) state:

This strategy is consistent with the desire to move away from the "shopping mall high school and toward a more coherent and integrated curriculum .... School-to-career strategies encourage breaking high schools into smaller learning communities. They are consistent with the use by magnet schools and charter schools of thematic approaches for organizing instruction. The pedagogy of school-to-career strategies emphasizing project-based instruction, active and experiential learning, and the shift to teacher as coach, student as worker, is also in line with current reform movements. (p.548)

This reform effort has taken hold in a number of communities, where superintendents and educational leaders are seizing upon the potential of school-to-work as an avenue of systemic education reform. Goldberger and Kazis (1996) state:
..the integration of academic and vocational learning, an emphasis on closer links between schools and employers, the design of learning experiences outside the classroom and the use of careers and occupational clusters as away to organize the high school curriculum is emerging as a strategy for restructuring the high school experience so as to better prepare young people for both academic and occupational advancement. (p.548)

Hartoonian and Van Scotter (1996) write in support of school-to-work by maintaining that "individuals embark on the path toward learning by embracing active scholarship, citizenship, and artisanship—all three together. We cannot distinguish where one characteristic ends and another begins" (p.555). In the United States, education serves to promote the interrelated goals of self development, citizenship, and employment. Hartoonian and Van Scotter (1996) state:

Without a conscious effort by society to teach and learn these cultural and civic virtues, a democratic capitalistic republic will not long endure. Thus this nation's first priority and public policy goal must be to ensure our republic's survival as a free nation by developing the minds and hearts of its students the qualities of good scholars, citizens, and workers. (p.556)

They also discuss the impact that economic cycles have on education. Specifically they state that our economy is now a global economy that is intertwined with others on the world market and the term domestic economy is no longer valid. "Economic activity is essentially global; we all inhabit one economic world. As a result, education must address both broader and higher standards" (Hartoonian and Van Scotter p. 556).
Hartoonian and Van Scotter (1996) provide a good synopsis regarding the role of business cycles and the economy that have always applied pressure on schools to help maintain and expand the international economic competitiveness of the United States. Their retort was quite amusing:

The relationship between markets and education is a theme that dates back more than 100 years, to the time when the United States became a minor and then major player in the global economic network ..... Needless to say, reasonable and discerning observers understood that government policy and corporate practices had much more to do with these economic conditions than did school curriculum. (p.556)

The triad of scholarship, citizenship, and artisanship proposed by Hartoonian and Van Scotter (1996) broadens and deepens the meaning of School-to-Work reform efforts. Rather than describing the basic components of school based learning, work based learning, and connecting activities, the triad values school-to-work strategies as important for all students, not just for the academic middle, nor the academically blessed as referred to by Gray (1996).

Hartoonian and Van Scotter (1996) believe that the work force and those preparing to enter the work force will require the triad of scholarship, citizenship, and artisanship. These attributes are distinct but also interrelated. They feel that this triad serves as a model to prepare a productive and enlightened work force and could guide the development of school-to-work programs.

According to Hartoonian and Van Scotter (1996) the first part of the triad, scholarship involves learning by doing and the ability to apply knowledge:
In effect, this means that students should be able to think, write, and communicate with clarity, conciseness, variety, complexity, and richness that is appropriate for high-quality work. Likewise students, should develop habits of mind that include curiosity, speculation, thoughtfulness, and imagination. (p.557)

Learning then becomes a shared responsibility between teacher and student, rather than providing information, teachers stimulate and coach students, holding them accountable for their own learning. Hartoonian and Van Scotter state:

... teaching becomes a sophisticated form of learning. In the process, young people acquire skills and attitudes—including a love of learning—that will sustain lifelong learning. We are not likely to inculcate such attitudes unless students are involved in projects, simulations, role playing, demonstrations, internships and other hands on activities. (pp. 557-58).

The second part of the triad is citizenship, which indicates that employers desire workers who bring a strong work ethic, characterized by dependability and perseverance. Hartoonian and Van Scotter (1996) state that "Business knows that students need more than knowledge and skills to contribute substantially in the workplace. They must also exhibit civility" (p. 558)

The third part of the triad is artisanship, which simply means that in order to produce high quality goods and services, everyone must take immense pride in being a craftsperson or artisan in anything they do. Hartoonian and Van Scotter (1996) believe that:
Artisanship, both in school and on the job, taps a person's gifts and talents, reveals what one is good at, commands deep involvement in and respect for work, and gives one's work meaning. With opportunities to do high quality work, learning and working become inseparable. (p. 558)

Hartoonian and Van Scotter (1996) conclude that, as schools incorporate in their curricula the characteristics of the triad, they will become a creative, productive, efficient, and learning workplace. They profess a school-to-work model in which students "develop not only worthy habits of mind and of hand but also habits of the heart" (p. 559).

Bailey and Merritt (1997) support the premise that Hartoonian and Van Scotter (1996) have presented that school-to-work is for all students and can effectively deliver curriculum for the college-bound. Accordingly they have identified the three basics of school-to-work as authentic teaching and learning, guided educational experiences outside the classroom and career and interest exploration. Bailey and Merritt (1997) focus their attention on how school-to-work can be used to prepare students for college. They focused on six reasons for consideration.

First, they present that the pedagogical arguments used to support school-to-work apply to all learning, and can improve learning even for those in apparently successful college preparatory programs. Second, the complacency about the college prep system is not warranted. Third, the high college dropout rate is one of the least discussed problems in the country's educational system. According to the American College Test Program Survey (1996, as cited in Bailey & Merritt, 1997), even though college enrollment rates are at an all time high, 33% of all college freshmen enrolled in a BA/BS programs drop
out after their first year. Bailey & Merritt (1997) state:

Thus, there is a tremendous amount of wheel spinning and wasted effort in college. This suggests that the current secondary school system could in fact do a much better job of preparing students for college, or perhaps help them decide to try something other than a four-year college or university. One of the central goals of the school-to-work strategy is to help students think systematically about their goals and aspirations. (p. 8)

Fourth, almost one-half of college students work at least part-time while in school. These are usually low-paid unskilled jobs having nothing to do with their studies. Bailey and Merritt (1997) state "high school programs that help students define their goals and give them some work-related skills could give young people more access to higher skill and higher paying jobs while in college." (p. 8) Fifth, there are growing complaints about the college admissions systems. A student's impressive record does not necessarily mean that they have mastered the knowledge and skills required for college. Sixth, the argument in favor of school-to-work must go beyond the claim for preparing children for work. In order for it to develop into broader reform it must be seen as an equally good path to quality baccalaureate programs. As Bailey and Merritt (1997) conclude:

Thus as long as school-to-work does not close future options for selective colleges, while benefiting the large majority of students, it would make sense, from the point of view of society as a whole, to promote school-to-work in elite high schools. (p. 9)
Bailey and Merritt (1997) further discuss that the school-to-work model appears to have wide support from a variety of constituencies. According to Pauly, Kopp, and Haimson (1994), researchers at the Manpower Demonstration Research Corporation, stated the recognition among policy makers, educators, and the public that students need programs such as school-to-work to help them make transitions from high school to post-secondary learning opportunities.

Skeptics and Critics at the Gate

Even though school-to-work programs and reform strategies enjoy widespread support, many parents, teachers, educational administrators and counselors, college admissions personnel, and employers remain skeptical about its potential as a means to prepare students for college.

In 1995, Public Agenda conducted a series of focus groups in Westchester County, New York for the Westchester Education Coalition. This county is of unique interest because it is a suburban New York county with many academically successful school districts that pride themselves on substantial Ivy League admissions from every high school class. The results of these focus groups sensed uncertainty from parents and teachers regarding school-to-work. The parent and teacher focus groups believed that it diverted students from academic learning and college preparation. In addition, they viewed school-to-work activities as an approach which forces early career choices and is designed to prepare young people for employment in a specifically defined non-professional occupation upon graduation from high school. They believed that work
experiences or internships diverted students' attention from learning academic skills and taking competitive honors and Advanced Placement courses.

This opinion seems to be pervasive throughout the country. Chuong-Dai Vo (1997) indicates that there is a growing concern among parents that "school-to-work is an unsound educational program and a federal government infringement on local autonomy" (p. 20). He further reports that in Fairfax County, Virginia, parents wrote letters to local newspapers comparing the county's new career pathways approach to socialism, and have accused the school district of being more interested in "turning out workers than critical thinkers" (p. 21).

Through their national offices in Washington, D.C., conservative groups like the Eagle Forum and the Family Research Council urge their members to oppose federal funding of school-to-work. These organizations have designed an organized attempt to derail the acceptance of School-to-Work funding by several states. There are several congressional members who have fought against their states applying and accepting these funds.

The general opposition regarding School-to-Work is the general belief that it will lead to a total managed economy where all employment and educational decisions are made by someone other than the parent, student, employer or educator. By pursuing the federal funding, these critics and skeptics believe that valuable state rights are being eschewed. In his letter to his constituents, State Representative from the 128th Legislative District in Pennsylvania, Samuel E. Rohrer (1998) stated:

Across this nation, legislature after legislature has witnessed a gross violation.

The expanded authority of STW and other contracts place in the Governor's
office to distribute the dollars and implement public policy according to the contract is dangerous, foolish, and unconstitutional. Every Governor that embarks on this process violates his constitutional oath! The executive branch is to enforce the law not make the law! No one who claims to be a conservative can support such violations. In fact, the failure to recognize such violations in this situation is an even greater travesty. (p. 2)

This type of vitriolic rhetoric has harmed the School-to-Work movement. By characterizing it as unconstitutional and un-American, the opposition has appealed to the negative forces of the political debate. Phyllis Schafly, Director of the Eagle Forum, a conservative watchdog group, (1998) claims that the School-to-Work system has been used overseas which led to the “destruction of the economy and smothering of individual initiative….In America exalt free choice. The STW system rewards conformity. In America, we cherish the uniqueness of individuality” (p. 1).

Miscommunications appear to be spreading the backlash toward school-to-work programs. Chuong-Da Vo (1997) quotes a parent, Mary Breed of Fairfax, Virginia, who believes school-to-work “pigeonholes” students into one career and limits their ability to enroll in college. Chuong-Da Vo (1997) continues the analysis of the conversation with Mary Breed:

She expects one of her four children to enter the vocational track and thinks it should be strengthened, not combined with the college prep track. Meanwhile her 19 year-old son, who is a liberal arts major at the University of Virginia, still doesn't know what he wants to do. It would have been ridiculous for him to pick a career pathway in junior high. It's a very naive
system that doesn't make sense or work in reality. Unfortunately, we have 
a lot of bureaucrats interested in it. (p. 20)

This mindset and thinking continues to frustrate proponents of school-to-work, who 
believe school-to-work helps eliminate tracks and provides all students the benefit of a 
career-focused education.

An American Viewpoint survey of 1,000 people (1996, as cited in Chuong-
Da Vo) found 83 percent agreed schools should focus on career preparation. Trish 
McNeil, U.S. assistant secretary of education, notes "parents often will agree with school-
to-careers principles such as high academics and a focused education, but launch a 
system-wide reform based on the principles, and the public recoils" (Chuong-Da Vo p. 
20).

Bailey and Merritt (1997) found that school-to-work programs and strategies 
teach skills that are important in preparing students for college. The opposite impression 
of parents, teachers, and college admissions officers that the benefit of learning these 
skills will compromise academic skills is unfounded. In fact, the school-to-work 
approach has the potential to teach academic skills as well as and possibly even better 
than more traditional approaches. Bailey and Merritt (1997) conclude:

In addition to teaching academic skills and preparing students for college, 
school-to-work benefits students by teaching marketable skills, and 
demonstrating what is expected on the job, and helping to define and 
understand personal goals and aspirations. Students also received 
psychological and developmental benefits from their experience working in 
the adult world. (p. 3)
School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239)

On May 4, 1994, President Clinton signed into law the School-to-Work Opportunities Act 1994 (Pub. L. No. 103-239). The Act was developed with the input of business, education, labor, and community-based organizations that have strong interest in how American students prepare for the changing world of work in the twenty-first century. It helps embody an answer to critics, who have indicated that the United States does not have any formalized school-to-work transition for its youth. The law was based on the rationale that too many high school students were entering the workforce without the entry-level skills necessary to succeed in the changing workplace.

The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) (Pub. L. No. 103-239) was not the first piece of legislation passed by the federal government to provide funding and direction in workforce education. With the passage of the Smith-Hughes Act in 1917, Congress began its long-term effort in support of vocational and workforce education. Through the years, this legislation has encouraged the development of teaching areas such as business, home economics, distributive education, trade and industry, health, and agriculture. Vocational education legislation has targeted students with special needs, constructed new facilities, updated equipment, improved planning, evaluation and accountability, and stimulated research, demonstration, and leadership development (Hoachlander, 1995). For years vocational education has addressed the needs of young people who chose to develop a skill before leaving high school and enter the workforce.

Today high school students are thinking differently about careers than they did twenty years ago. According to the Department of Education’s National Center for
Education Statistics (1995), vocational education enrollment dropped from about 22 per cent in 1972, to about 12 per cent in 1992. Part of the reason for the decrease in vocational education enrollment could be attributed to the ever increasing academic and assessment requirements that a student must face in order to graduate from high school, which leaves students less time for electives.

Even though the federal government has supported vocational education, it is not viewed as a viable pre-employment training system. The MIT Commission on Industrial Productivity in its study, "Made in America" made these conclusions. The report further concluded that the curriculum used to instruct vocational students should reflect the needs of the labor market of the future. In addition, employers do not view high school vocational education programs as sources of skilled workers. In some cases students who have participated in vocational education programs have become stigmatized.

According to the Commission on Skills of the American Workforce (1990), due to the rapid pace of technology, it becomes foolish to provide students with narrowly focused training. The skills they develop today will only result in obsolete skills for tomorrow, partly because the average American worker changes occupations four to six times in a lifetime.

In 1990 Congress passed the Carl D. Perkins Vocational and Applied Technology Education Act to help transform vocational education and ultimately restructure schools in the twenty-first century. The Act emphasized the need to integrate academic content in vocational education. This presented a new paradigm for vocational education in preparing students for the world of work. Although this vision provided by Congress
through the enactment of Perkins Act was worthy, it presented new challenges in translating this initiative into the day-to-day reality of schools.

According to the Smith and Rojewski (1992):

A true integration of vocational education and academic education means nothing less than a total restructuring of high schools. Changes in the Perkins Act called for the following transition options: (1) emphasizing the integration of academic and vocational education; (2) requiring greater accountability of vocational programs; (3) distinguishing between secondary and post-secondary levels of vocational and technical programs; (4) encouraging local districts to provide leadership in reforming and improving transition from school-to-work; and (5) placing greater emphasis on a curriculum and instruction that enhances students’ critical thinking and problem solving skills. (p. 257)

Grubb's (1990) research discovered that many states and localities pursued the guidelines of the Perkins Act in variety of ways. These approaches included the integration of academic content into vocational courses and the integration of vocational problems into academic courses to restructured programs that used team teaching, block scheduling, and a completely new curriculum. Grubb concludes these changes had a major influence that was important to education.

Through the enactment of the School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239), the federal government encouraged schools to restructure themselves by providing $300 million in seed money from 1995 through fiscal year 1999. The law funds activities in three primary areas: school-based learning, work-based learning, and connecting activities. The Act emphasizes these activities as a theme to integrate
academic and vocational learning, school-based and work-based learning, and secondary and post-secondary education. Furthermore, the Act cites cooperative education, youth apprenticeship, career academies, tech prep, service learning, and internships as promising school-to-work activities.

Although the School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) encourages the development of school-to-work systems, it does not create a new program. It simply allows states and local partnerships of business, labor, government, education, and community organizations to bring together their collective efforts at education reform, workforce preparation, and economic development by creating a system for all students in order to make their education more relevant to careers and lifelong learning.

The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) was a departure from previous federal legislation that has called for specific support of vocational education as evident in the Smith-Hughes Act of 1917 and/or the redirection of vocational education as advocated in the Carl D. Perkins Vocational and Applied Technology Act of 1990. The Act called for a new system, not a new program. Therefore, there is no singular model of a school-to-work system. States and their partnerships design the school-to-work system that makes the most sense for them. Although these systems may be different from state to state, there will be a common theme and thread throughout any and all of them. According to Paris (1995):

Each system must provide every student with a relevant education, which allows students to explore different careers and see what skills are required in their work environment. Every student must be provided with skills, obtained from structured training and work-based learning experiences, including necessary
skills of a particular career as demonstrated in a working environment. Finally, every student must be provided with valued credentials by establishing industry-standard benchmarks and by developing education and training standards, which ensure that proper education is received in each career. (p. 5)

Currently, the legislation is sunsetting and funding for school-to-work programs are being phased out. The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) has provided nearly $2 billion in funding, which has benefited programs that emphasizes any type of work-based learning activities. With the phasing out of this funding, the proponents of this reform are concerned with the sustainability of programs that embodies the concepts outlined in the legislation. According to Cutshall (2001):

The School-to-Work Opportunity Act provided federal funds to be used in the initial planning and establishment of statewide school-to-work systems. When the funding runs out on October 1, 2001, will these programs be able to stand on their own? One of the key factors in program sustainability will be continued support at the state level. So far, many states have passed legislation to support School-to-Work efforts and funding. (p. 22)

Promising School-to-Work Activities

There is no single answer to the question, what is school-to-work? School-to-Work simply creates an infrastructure and system that may be based on existing models and/or activities within a school community. An activity effectively administered will systematically bring the workplace into the classroom and transform workplaces into laboratories of learning. The basic components of school-to-work will hopefully bring
new and exciting ways of learning and teaching that will enable students to achieve high standards. In addition, school-to-work activities may revitalize a community and enable business to become true partners in education.

As previously mentioned, the School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) is not a new program. It simply provides funding to create a system that embodies the basic components of school-based learning, work-based learning and connecting activities. Many existing programs that are currently in place have been endorsed by the Act as promising activities. This section will summarize those activities.

Cooperative education was a method of vocational education instruction that began in 1908 in Fitchburg Massachusetts. According to Bailey and Merritt (1993), it was considered one of the most innovative forms of industrial education. Its purpose was to provide high school students with paid employment closely linked to the classroom. At the time of its development, there was a demand for properly trained and educated workers to expand the industrial sector of the United States economy. The mechanism for the delivery of cooperative education instruction was derived through written cooperative arrangements between the school and employers, required academic and related vocational instruction, with a job in any occupational field. Stone (1995) explains that the two experiences must be planned and supervised by the school and employers to enhance students' education and employability.

Currently, cooperative education is less formal than it was in its early years. Students who participate in cooperative education not only received pay but also may receive high school credits toward graduation. Stone (1995) outlines a typical day for a student in cooperative education is to attend academic classes during the morning and to
work at a job-site during the afternoon. A school-based coordinator oversees the program and maintains contact with employers, students, parents, and academic teachers.

Apprenticeships are another promising activity endorsed by the Act. Hamilton and Hamilton (1994) state the concept of apprenticeships have been around since the ancient Greek and Roman times. As time passed, craft guilds evolved as did the structure for training, a master/apprentice relationship was developed where the apprentice worked to achieve journeyman status. The master craftsman viewed his role as a duty and civic responsibility to train young people. The concept of apprenticeship came to America in colonial times. Hamilton and Hamilton (1994) further report:

The Industrial Revolution changed the way occupations were learned.

Apprenticeship training changed to accommodate the machine age. Living with a master craftsman to learn his trade was no longer necessary. Wages replaced the need for room and board and bartering for services. By the 20th Century, America no longer had a system in place for training craftsmen. Immigrants were generally master craftsmen who brought their skills with them to America or men taught themselves skill by observation and trial and error (p.38)

Although apprenticeships have had a checkered history in America, interest in them has been renewed with the passage of the School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239). Prior to this, funds for supporting apprenticeship programs were declining. According to the U.S. Department of Education (1992), youth apprenticeships represent a partnership between business and labor unions who train skilled workers in the construction and metal trades, even though apprenticeship
programs have exposed students to the realities of work in the areas of health care, banking, insurance, law, hospitality and retailing.

Briefly described, youth apprenticeship programs allow high school seniors to become registered apprentices while completing their high school education. Students enter the program in their senior year in high school, work part-time, receive on the job instruction, and enter the apprenticeship full-time upon graduation. Smith and Rojewski (1992) report that the hours students work while in high school count toward the time required to complete the apprenticeship. When the student completes the apprenticeship (usually two to four years after graduation from high school), the student receives a certificate that indicates his journeyman status that would be recognized throughout the industry.

Bailey and Merrit (1993) submit that:
Youth apprenticeships should have a framework that includes four basic components: (1) student participation—a broad cross-section of youth; (2) educational content—integration of academic and practical education along with broader employability and social skills; (3) location of instruction—a significant part on-the-job; (4) credentialing—acquiring credentials that are recognized by a wide range of employers. A significant amount of the student’s education takes place at the workplace. This is what differentiates youth apprenticeship from other school-to-work transition programs. (p.45)

Kazis (1993) reviews that youth apprenticeship is about building competence, confidence, and connections for young people; however, critics feel that it is a long way from becoming the preferred method of training workers in the United States. Some of
the barriers are employer reluctance, union hostility, and parental misgivings. Stanfield (1993) states, “There is the fear that youth apprenticeship will dilute union apprenticeship programs and provide a vehicle for employers to replace well-paid union workers.” (p. 1046)

The impetus for Tech Prep (Technical Preparation) began with the passage of the Carl D. Perkins Act of 1990. This concept dates back to the 1960’s, and was advocated by Dale Parnell, then president of the American Association of Community and Junior Colleges, after he wrote *The Neglected Majority*. Tech Prep involves the coordination of curriculum during the last two years of high school and two years of community college. According to Parnell, Tech Prep is widely known as 2 + 2. There is a required proficiency of mathematics, science, communications, and technologies that lead to an associate degree or certificate in a particular career field. Bailey and Merrit (1993) describe the typical components of a Tech Prep program to include: (1) collaboration of both high school and community college and industry personnel to develop curriculum, teach lessons and monitor students at the work site. (2) careful sequencing of the academic curriculum; (3) adequate occupational training; (4) agreement between high school and community college to ensure that course work is neither repetitive nor redundant; (5) provide students with two types of certificates upon graduation—a high school diploma and a certificate from a community college; and (6) an advisory role for businesses that are involved.

Smith and Rojewiski (1992) state:

Tech Prep typically provides participants with structured worksite experiences that progress from half-time in high school to nearly full-time at the community
college level. The Tech Prep Associate Degree programs offer a coordinated curriculum that parallels a more traditional four-year baccalaureate degree program. (p. 88)

The Career Academy concept began in the late 1960's with its target population being at-risk students. These students were alienated from the educational process, and were at risk of dropping out of high school, but had potential. The Academy concept emerged in response to the growing national concern regarding dropouts, education and employment, and the inadequate preparation of young people in the workplace.

Through the years, the mission of the Academy concept was broadened not only to prepare students to enter the workforce upon graduation, but also the preparation for college or a combination of the two. The Career Academy is a school-within-a-school concept that offers students career-related academic curriculum. Rosenbaum (1992) indicates that it is generally a three-year program commencing in tenth grade or sometimes beginning in ninth grade. The curriculum is organized around a theme such as health careers, electronics, finance, or computer related occupations. Each of these themes provides a range of job opportunities that require a college degree to those that require no post-secondary education training. Therefore, college is always an option to Career Academy students.

Work experience is essential to the Career Academy program, which usually occurs in the summer after a high school student's junior year and may continue during the senior year. The work experience provides students with the opportunity to apply what is learned in the classroom setting to the world of work. According to the Academy for Education Development (1989), "This paid work experience exposes students to the
variety of job opportunities in their career field. It also introduces students to the culture of the workplace (dress, language, and behavior) and to its expectations (punctuality, responsibility, and cooperation)" (p. 47).

Students receive close supervision while on their job placement. There is frequent communication between the job supervisors and the Academy staff. This relationship creates continuous and dynamic partnership between business and the schools. Business is involved in every aspect of the Academy—from designing the curriculum through its implementation.

A fairly recent program that has been embraced by the school-to-work movement is Service Learning. Although the concept is not new, it is a program that is responding to the debate about the civic health of our society. Robert Putnam (1995) cites declines in voter turnout, church attendance, union membership, and membership in voluntary associations as evidence of civic disengagement. The National Commission on Civic Renewal (1998), warns that “in a time that cries out for civic action, we are in danger of becoming a nation of spectators” (p. 1).

The concern regarding the concept of civic health in society can be traced back to the writings of John Dewey. Dewey (1916) suggested that a democratic society depends on the idea of “communal living”, whereby the decisions and actions we take as citizens affect other citizens. Dewey (1916) “A democracy is more than a form of government, it is primarily a mode of associated living, of conjoint communicated experience” (p. 93).

Service Learning is a form of volunteering being used in the schools that connects academics to volunteer service or service experiences in the community. Although many school reform efforts have been directed toward preparing better workers for business,
service learning has been acknowledged as a tool that prepares students to enter the workforce. As a work-based learning component in a school-to-work system, service learning extends learning beyond the classroom in real world contexts where students acquire not only basic math, science, English, and communication skills, but also broader problem-solving and decision-making skills. Instead of focusing on occupational skills, service learning addresses community issues and integrates academic learning with community service projects to develop broader workplace competencies. According to the School-to-Work Opportunities Resource Bulletin (1996), "In this respect, service learning and school-to-work are linked through their efforts to connect young people with their communities and service learning through community service and school-to-work through workforce participation" (p.1).

School-to-work advocates embrace Service Learning as a means to provide contextual, real world learning experiences in situations where work-based learning is limited or not appropriate. One of the concerns regarding the school-to-work efforts is the lack of work-based learning opportunities within a community for students to participate. Service Learning can provide a school system with an established continuum of experiential practices in the K-12 learning experience. Ernst and Amis (1999) state, "Through Service Learning, youth can experience positive outcomes such as increased motivation, skill development, positive self-image, and the opportunity to reflect upon the learning provided by structured experiences outside the classroom" (p. 3).

Furthermore, the National School-to-Work Office pronounced (1996):

The benefits of Service Learning go beyond simply providing young people with rewarding experiences. It also helps students identify how classroom learning
applies to the real world and how their service benefits others; develops stronger links between schools and community; provides supervisors with motivated, energetic youth volunteers; and provides needed services to communities. Service-learning can provide the opportunities for youth to develop skills and knowledge that will help move students forward in an identified career pathway. (p. 1)

The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) recognized internships as one of its promising practices. Internships are an experience in which a student is assigned an area of concentration or a specific project for an agreed upon period of time under the supervision of a mentor. An internship is usually for a short period of time and an unpaid work experience. Students, who traditionally participate in an internship program, are vocational education students, and it is the culminating activity in the career area they wish to pursue.

WISE Program

The WISE Program (Wise Individualized Senior Experience) began in 1973 at Woodlands High School, Hartsdale, New York. The program was designed to combat the infamous “senior slump”, that time when students have already applied and been accepted to college, and are waiting to graduate from high school. Mr. Victor Leviatin, a social studies teacher, pioneered a pilot project in his class in 1971. Soon thereafter, it became a signature program for the school.

The WISE Program allows students to design and carry out their own projects during the second semester of their senior year. Students receive English, social studies, and physical education credit for participating in the program, which frees up most of
their school day to work on their projects. The projects may range from a traditional career internship in businesses, doctor’s offices, architectural firms, and radio stations or through the pursuit of independent study in art, music, photography or mechanics.

In 1991 three retired teachers, lead by Mr. Leviatin, formed WISE Services, a not-for-profit organization, to help other schools develop similar programs based on the WISE model. With a staff of nine headed by Mr. Leviatin, WISE Services travels to schools to give informative presentations about WISE and provide support in the form of workshops to schools that have commenced their own senior experience programs. There are currently 37 schools nationwide that are now offering WISE to seniors as a result of the effort of WISE Services (Wade, 1999).

Although WISE’s success is based on allowing students to control and design their own projects, the program is very structured. Students must keep a daily journal, have weekly meetings with their school-based mentors of their choice, do a research paper on their projects, and make a final presentation to an evaluation committee composed of students, teachers, and community members (Wade, 1999).

Leviatin (1998) indicates that “Many senior projects put into action what most educational approaches say but do not do—they are really for all students” (p. 50). In fact, many students who are considered academically at risk participate and excel in the challenging, skill and confidence building activities that comprise senior projects (Leviatin, 1998).

The students, teachers, and community members involved in the program constitute a task force that is essential to implementing and maintaining the program. Leviatin and his staff present WISE to schools as an ever changing and dynamic program,
in which the task force makes all planning decisions and constantly evaluates and improves the process. Leviathan (1999) stresses “Collaboratively, learning communities are formed, and teens are seen in a more positive light. WISE empowers young people and parents who are working together with teachers as equals” (p. 764).

In order for WISE Services to agree to assist in the development and maintenance of WISE programs, the program must have local control, be open to all students across the academic spectrum, and be offered for academic credit. Finally, each high school must be willing to exchange information with the network of WISE schools (Wade, 1999).

Drucker (1994) indicated that education should no longer be limited to the schools. Education must be moved into the community and the work environment. Educational learning within the community must include teaching students how to be effective. Students must learn how to function within organizations and continue to develop outside of traditional classrooms. Megyeri (1999) supports this concept by indicating that critical thinking, critical learning, creative exploration, and civic responsibilities can all be developed through structured individualized studies. Furthermore, social responsibility and social justice are also enhanced through individually directed activities.

Gardner (1993) included a reexamination of differences and strengths through individual centered education with assessment related to all aspects of student ability and expression of ideas. Gardner believed that the purpose of school should be to develop intelligence and to help students reach academic and vocational goals that are appropriate to their particular strengths and intelligences. Gardner advocates for the concept of:
School community brokers whose tasks include matching students to learning opportunities in the neighboring community. These opportunities include apprenticeships, mentorships, internships, Big brothers, Big sisters, or other forums that would match the uniqueness of the individual with a learning environment. (p. 11)

In order for students to achieve success in individualized studies, it is imperative that support at the school and work site be available. Kochan and Trimble (2000) stated that traditional classes seldom include opportunities for students to learn and explore new concepts and skills. Work skills and a positive attitude do not develop unless there are ample opportunities for emotional and personal support for students.

The emotional and personal support for students participating in individualized studies extends to parents and caregivers. Ongoing communication with parents and caregivers may result in greater academic and performance advantages for students. According to Holladay (2000), research shows that students have a significant educational advantage when their parents are supportive involved, and exchange ideas on a regular basis with teachers and other school program staff. Parental components are necessary, and should be included in all school programs in order to address diversity and student involvement concerns.

In conclusion, students must have the support and the training necessary to make decisions and choices within any educationally directed program. Parents, teachers, and mentors according to Kouzes and Posner (1990), can provide students with clear directions, substantial encouragement, personal attention and feedback. The feedback provided to students ensures that learning takes place, so that they acquire the confidence
and knowledge that comes with experience. The collaborative efforts of all the stakeholders in the endeavor recognize each individual’s contribution and are critical to a program’s ongoing success.

The summary findings from the National Commission on the High School Senior Year (2001) support the concept of individualized student experiences offered by the WISE Program. The supporting documents indicate that students across the academic spectrum are better prepared for the demands of college and work by schools offering them opportunities for an academically enriching project or structured internships under the mentorship of a faculty member, either which will culminate with a final exhibition or presentation. The finding specifically states:

Attention must be given to structuring work experience in school to improve student learning. Research indicates that all students can benefit from quality, structured, “work-based learning” (including community service and internships). Good work experience can help students understand why literature and physics are important in high school; equally clear, too many hours working low-level service jobs can complicate learning. (p. 32)

**Conclusion**

The literature indicates that the transition from high school to the world of work and further learning poses a great challenge for most young people. Students face significant pressure to decide what they will do after graduation. In order for the United States to maintain its position as a major player in the world economy, it must address the issue of how youth is prepared to enter the workforce and/or post-secondary
opportunities. In addition, the nation must be concerned with how to develop in young people a sense of civic responsibility and a desire to become actively involved in the political, economic, and social issues affecting their communities.

The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) emphasizes the need to develop collaborative partnerships among parents, educators, government, social service agencies, community groups, and business and industry to provide sound educational programs for students to make the transition to the world of work or post-secondary education. The various approaches and programs reviewed in the literature expose students to real world situations through which they can develop skills vital to life beyond high school.

School-to-work programs must be designed for all students. The programs developed need to provide students with a realistic picture of a career with an opportunity to explore that career area. Regardless of whether a student intends to go to college or into the job market upon graduation from high school, students should be afforded an opportunity for career exploration and development.

The School-to-Work Opportunities Act of 1994 (Pub. L. No. 103-239) provided the funding to develop a system for all students from K-12 with the three basic tenets of school-based learning, work-based learning, and connecting activities. The Act emphasized the creation of a system, not another program. In doing so, it also endorsed several programs that contained the basic elements of the system but it emphasized that schools need to select those models that best meet the needs of their students. Therefore, the school-to-work models will vary from school to school because each will be customized to meet the needs of their student population and community.
Chapter III

Methodology

The purpose of this dissertation is to determine what influence the Walter Panas High School Individualized Senior Experience (WISE) Program has had on the selection of career choices and/or college majors of its student participants in comparison to non-participating students in the graduation classes of 1996, 1997, 1998, and 1999. The findings of this study will provide an in-depth program evaluation that will lead to program improvement and replication in other schools.

This chapter will describe the research design to be utilized, the research sample, the research procedures, the survey instruments, and the data collection and analysis procedures.

Research Design

Qualitative research will be used to collect data reflecting the perceptions of students, school-based mentors, work-based mentors and parents/caregivers regarding the influence of the program in achieving its goal of students determining their career choices and/or college majors. This particular type of research is designed to analyze and determine an individual’s perceptions and thoughts through data that has detail and depth. Krathwohl (1998) discusses the means by which the qualitative method operates:
Qualitative methods are especially useful for exploring a phenomenon, for understanding it, and for developing an understanding of it into a theory. These methods humanize situations and make them come alive. They are particularly useful in describing multidimensional, complex interpersonal interaction where the limited focus of quantitative measures would be inadequate. They more likely focus on process than product. They communicate well to practitioners. (p. 243)

Leedy (1997) explains the various four common qualitative research designs “that are marked by distinctive interests, theories, issues, and research methods….case study, ethnography, phenomenology, and grounded theory” (p. 156).

This dissertation will utilize a case study design incorporating ethnographic methodology in order to obtain information on the WISE program. Leedy (1997) defines case studies as a type of qualitative research in which the researcher “explores a single entity or phenomenon (the case) bounded by time and activity (a program, event, process institution, or social group) and collects detailed information by using a variety of data collection procedures during a sustained period of time.” (p. 157)

Furthermore, the case study is a descriptive research technique whose primary purpose is to “describe, in detail, certain characteristics of the subject. A case study approach enables the researcher to develop detailed and rich data to study social interaction and social meanings” (Krathwol, 1998, p.33).

Case studies may be used in evaluation research, which will be reflected in this study. The primary purpose of program evaluation is to assist in improving the quality of
the program in order to improve outcomes or services for students. Evaluation can be a powerful tool for improving the effectiveness of a program.

Program Description

The WISE Program (Wise Individualized Senior Experience) began in 1973 at Woodlands High School, Hartsdale, New York. The program was designed to combat the infamous “senior slump”, that time when students have already applied and been accepted to college, and are waiting to graduate from high school. Mr. Victor Leviatin, a social studies teacher, pioneered a pilot project in his class in 1971. Soon thereafter, it became a signature program for the school.

The WISE Program allows students to design and carry out their own projects during the second semester of their senior year. Students receive English, social studies, and physical education credit for participating in the program, which frees up most of their school day to work on their projects. The projects may range from a traditional career internship in businesses, doctor’s offices, architectural firms, and radio stations or through the pursuit of independent study in art, music, photography or mechanics.

In 1991 three retired teachers, lead by Mr. Leviatin, formed WISE Services, a not-for-profit organization, to help other schools develop similar programs based on the WISE model. With a staff of nine headed by Mr. Leviatin, WISE Services travels to schools to give informative presentations about WISE and to provide support in the form of workshops to schools that have commenced their own senior experience programs. WISE Services provides school districts with a framework to develop their own program that best meets the needs of their particular community. The program is developed
collaboratively through the creation of a task force that consists of students, teachers, administrators, parents, and business/community members. Every WISE Program has some similarity, but each is unique in its design to the community it serves.

The WISE program at Walter Panas High School is open to all seniors, and takes place in the second semester of the student’s senior year. Instead of continuing to attend English and social studies classes in the second half of the senior year, students participate in an internship in a career path they may wish to pursue. Under the guidance of a school-based mentor and work-based mentor, students are closely monitored and evaluated. Students are required to meet weekly in a seminar format. Additional requirements are the completion of a research paper, maintaining a journal, and completing an oral presentation about their internship before a panel, which include mentors, teachers, administrators, community members, and peers. The presentation serves as the student’s final assessment for completion of the internship. Upon successful completion of the internship, the student earns a half-credit in English and social studies to meet graduation requirements.

The WISE program helps provide students, across the academic spectrum, with career development information in order for them to make informed choices about their future, whether a student plans to enter the workforce immediately after graduation or whether a student plans to pursue a baccalaureate program.

This dissertation will focus on the question: What influence has the Walter Panas High School Senior Individualized Experience (WISE) program had on the selection of career choices/college majors by its student participants in the graduating classes of 1996, 1997, 1998, and 1999 as compared to students who have not participated in WISE?
Research Sample

The sample of key subjects for this study will be the student participants, their parents/caregivers, school-based mentors and work-based mentors. These key participants were all participating stakeholders in the WISE Program. In addition, non-participating students will also be surveyed to aid in the determination of the effectiveness of WISE. This dissertation will focus on the graduating classes of 1996, 1997, 1998, and 1999. The WISE program is entering its fifth year, and the sampling of its graduates will enhance the evaluation process toward program improvement.

According to Krathwohl (1998) regarding the use of participant-oriented evaluation, he indicates:

If we return to the prime assumption that a successful evaluation is one with findings that are used, then clearly one of the most effective ways of getting evidence used is to involve the stakeholders in as much of the evaluation process as possible...findings and recommendations of evaluations done by an evaluator and sponsor, and then delivered to the stakeholders as a fait accompli, were often rejected. However, if the stakeholders had a role in the evaluation process, rejection was not likely.

(p. 599)

The size of the sample for this dissertation among the five groups totals 584 subjects divided among student participants, parents/caregivers, work-based mentors, school-based mentors and non-participating students. The actual breakout of the research sample is listed below:
WISE Alumni
   Class of 1996  50
   Class of 1997  45
   Class of 1998  41
   Class of 1999  36

Parents/Caregivers  172
Work-Based Mentors  85
School-Based Mentors  55
Non-Participating Students  100

A random sample of 25 non-participating students from each graduating class from 1996-99 were surveyed. In addition, the work-based mentors consistently participate in the program each school year providing work-sites for students.

Participation by these subjects in this research design is totally voluntary.

Reviewing class lists, school-based mentors' volunteer list, directory of work-based mentors, local telephone directory, and Chamber of Commerce Directory will identify the subjects. The subjects will be contacted to participate in this study by mail, telephone, and e-mail.

Research Procedures

The purpose of this dissertation is to determine what influence the Walter Panas High School Individualized Senior Experience (WISE) Program has had on the selection of career choices and/or college majors of its student participants in comparison to non-participating students in the graduation classes of 1996, 1997, 1998, and 1999. In order to obtain the data required for this study, multiple data collection strategies will be used.
In an ethnographic study the research relies on observation, interviewing, and document
analysis or a combination of these to provide an in-depth understanding of what is studied (McMillian & Schumacher, 1993).

Questionnaires, telephone interviews, sampling of student journals and focus group discussion will be utilized with the key participants. The focus group discussion will be conducted with a sampling of key participants from students, their parents/caregivers, school-based mentors and work-based mentors. The researcher will be using structured interview guides developed by this researcher, with published commercial surveys to be used as a resource. Open-ended questions regarding program elements, program organization, and intern experiences will also be utilized. Student journal entries will provide further insights on student reflections as each progressed through the program.

There will be no requirement for participants to reveal their names, addresses, telephone numbers, or other identifying information on the survey questionnaires. Each participant group’s questionnaire will be printed on different colored paper and coded by number in sequential order. A master list will be kept by the researcher to check and maintain the number of respondents to the questionnaires. The student participants’ questionnaire coding will be numbered sequentially with the prefix of the year of high school graduation, e.g., 96-1, 96-2, ....... The master lists will be stored separately from the completed questionnaires in a locked file cabinet drawer. All master lists will be destroyed upon completion of the research to assure confidentiality.

During the focus group session, with the informed consent of the subjects, the interviews will be audio tape recorded. A Sony standard tape recorder will be used for these sessions. It will be the only machinery that will be utilized and be in contact with
the participants. If a subject refuses to be tape recorded, the researcher will take extensive notes. The majority of the data collected will be based on survey and questionnaire methodology that will be mailed to the subjects.

**Data Collection Procedures**

Data collection will be accomplished through survey questionnaires, telephone interview, sampling of student journals and the use of focus group interviews. These qualitative research techniques enable the researcher to gain an intimacy with the data as indicated by Patton (1989).

Guba and Lincoln (1981) note:

Interviewing is the preferred tactic of data collection when in fact it appears that it will get better data or more data or data at less cost than other tactics....The ability to tap into the experience of others in their own natural language, while utilizing their value and belief frameworks, is virtually impossible without face-to-face and verbal interaction with them....Interviewing in itself should be thought of as almost indispensable in the tactics of the naturalistic inquirer. (p. 154-5)

By collecting data from a several sources, data is confirmed and validated. The term associated with this process is known as triangulation. According to Krathwohl (1998), “triangulation consults different sources to determine the validity of data using purposive sampling” (p. 275). Data triangulation involves the use of two or more sources to establish factual accuracy. Krathwohl (1998) provides the example of “an informant’s recall of a meeting by checking the secretary’s minutes.” (p. 275)
Lincoln and Guba (1987) speak of the importance of triangulation:

Triangulation of data is crucially important in naturalistic studies. As the study unfolds and particular pieces of information come to light, steps should be taken to validate each against at least one other source (for example, a second interview) and/or second method (for example, an observation in addition to an interview). No single item of information (unless coming from an elite and unimpeachable source) should ever be given serious consideration unless it can be triangulated.

(p. 283)

Participants will be contacted through a variety of communication devices. Surveys will be mailed to student participants, non-participating students, parents/caregivers, and work-based mentors with a stamped, self-addressed envelope. School-based mentors will be contacted via the school courier system. If collection of data falters through these means, telephone contact will be made to prompt subjects to return surveys or participate in a telephone interview.

Participating in the telephone interview versus the return survey can yield more rapid data collection in a timelier manner. The telephone interview tends to provide more anonymity than a face-to-face interview, and questioning as well as responses may become more in depth.

Focus group discussion will be conducted by invitation to a randomly selected group of subjects from each category of subject. Questions will be of an open-ended variety and recorded via audiotape. The participants participating in the focus group discussions will be approximately four to six subjects from each group—student participants, parents/caregivers, school-based mentors, and work-based mentors.
The focus group discussion will last no longer than 45-minutes, and will be held at a site convenient for all subjects. This researcher will be using structured interview guides developed by the researcher, with published commercial surveys to be used as a resource. Open-ended questions regarding program elements, program organization, and intern experiences will also be utilized.

**Survey Design**

In order to obtain the data needed from the key subjects involved in the WISE program, a survey questionnaire was developed by the researcher using a survey instrument developed by the National Center for Restructuring Education, Schools, and Teaching (1997). This survey instrument was used as a resource to design a questionnaire that would fulfill the purpose of the dissertation.

The researcher made contact with Dr. Betty Lou Whitford, Director of NCREST, through Mr. Vic Leviatin, Director of WISE Services. Since NCREST, under Dr. Whitford's leadership, made a similar evaluative study for the WISE program at New Rochelle High School, Mr. Leviatin urged the researcher to contact Dr. Whitford for guidance and permission to utilize the survey. The letter requesting permission and granting permission to use the survey instrument is located in the Appendix.

Although the NCREST Survey Questionnaire was helpful, it did not completely address the purpose of this dissertation which is to determine what influence the Walter Panas High School Individualized Senior Experience has had on the selection of career choices and/or college majors of its student participants in comparison to non-
participating students. In addition, the NCREST Survey focused on only one year of the program, and did not survey the various stakeholder groups involved in the program.

Using the NCREST Survey as a resource, the researcher began to construct a series of five separate questionnaires to survey the various stakeholder groups involved in the Walter Panas High School Individualized Senior Experience. The survey design is to determine not only the influence of the program, but also to determine whether program goals have been met. In addition, the survey design solicits recommendations for program improvement from the varied perspectives of the stakeholder groups.

Each stakeholder survey questionnaire included closed-end questions, open-ended and scaled responses questions. There were similar questions on each stakeholder survey questionnaire (e.g. year of participation, etc.), as well as questions to probe and elicit responses from the particular stakeholder group’s participation in WISE.

The closed-ended questions or fixed response items provide choices to respondents who must select one of the choices provided. The types of close-ended questions that are included in all five surveys are behavior checklists, ranking formats, and Likert-type rating scales. The behavior checklist will contain questions and/or statements that will provide information about the stakeholder experience in the WISE Program. The ranking format checklist will contain questions and/or statements that will provide data regarding preferences, interests, opinions, and usefulness of various aspects of the program.

The Likert-type rating scales will gather information to determine the degree to which a stakeholder finds the program interesting, satisfying and helpful. In addition, it will measure attitudes, opinions, perceptions, beliefs, and the frequency a stakeholder
participated in certain activities of the program.

Rea & Parker (1992) state:

There are several advantages of closed-ended questions. One is that the set of alternative answers are uniform and therefore facilitates comparisons among the respondents... Another advantage is that the fixed list of response possibilities tend to make the question clearer to the respondent... remind the respondent of alternatives that otherwise would not have been considered or would have been forgotten. (p. 39)

Each survey will have a series of open-ended questions or open response items to permit the stakeholder to provide their own response rather than to select one. These open-ended questions will enable the researcher to know the stakeholder's thinking about some various aspects of the WISE program from their particular vantage point. It will provide more in-depth information than the Likert-type rating scale.

According to Thomas (1999):

Open-response format items can be used to gather a wide-range of information. It permits respondents to express feelings, ideas, or reactions without being limited to preset categories. However, it is limited by the amount of time required to summarize responses and the amount of time that may be required for respondents to provide the information needed. (p. 47)

Rea & Parker (1992) indicates:

Open-ended questions are used by researchers in situations where the constraints of the closed-ended questions outweighs the inconvenience
for both the researcher and respondent. It is recommended that open-ended
questions be used sparingly and only when needed...will inevitably elicit a certain
amount of irrelevant and repetitious information. ...requires a greater degree of
communicative skills ....elicit responses that are difficult to understand. (p. 440)
The surveys developed for the student participants, school-based mentors, and
work-based mentors all contained a question to rank each goal on a scale of 1 to 5 with 5
being the highest frequency of success in achieving the goals of the program. The
surveys developed for parents/caregivers asked the respondent to rank their child’s
change in attitudes and behaviors regarding their future and school.

The surveys developed for the non-participating students asked for specific
demographic data, future plans, rating of the school’s program regarding college
preparation and career education, and the ranking of importance of a listing of reasons
regarding career choices. Several open-ended questions were asked regarding why they
did not participate in the WISE Program and what recommendations they would offer in
improving the overall learning experience at the high school.

The surveys developed for the student participants (WISE Alumni) are a series of
closed-ended questions that asked students why they chose their particular project or
internship experience. In addition, students were asked a scaled response question rating
a series of statements regarding the WISE Program. The remaining parts of the survey
were a series of open-ended questions asking specifically how students felt about the
program, helpfulness of their mentors, and recommendations for program improvement.

The surveys developed for the school-based mentors included a series of closed-
ended questions ranking statements of program benefits for students, skill achievement of
students, and the support activities they provided for their students. The remainder of the survey asked a series of open-ended questions regarding their attitudes, perceptions, and recommendations for program improvement.

The surveys developed for the work-based mentors included a closed-ended question ranking the benefit experienced by students at the internship site. The remainder of the survey included a series of open-ended questions that probed for information regarding their feelings about working with students and recommendations for program improvement.

The parent/caregiver surveys asked a series of open-ended and closed-ended questions that probed for program satisfaction, recommendation for participation to other parents, and recommendations for program improvement. As previously mentioned, the parent/guardian survey included a scaled response question regarding the improvement of student attitudes and behaviors.

A pilot test for each survey was given to two to three members of each stakeholder group to check for understanding and clarity of directions, questions and other items. Participants were also asked to review the format and layout of the survey, and the length of time to complete each survey.

The pilot test improved the overall quality of the instrument. All stakeholder groups felt that the format and layout was easy and simple to follow. They all recommended that statements that were initially check-off items be ranked to improve the validity of the results for program evaluation. The length of time to complete the surveys ranged from five to ten minutes for student participants, school-based mentors, and non-participating students. The work-based mentors and parents/caregivers surveys time for
completion ranged from three to five minutes. The results of the pilot tests are presented according to the six research questions presented in this dissertation:

1. **What impact did the WISE Program have on students regarding their decision making about their future career plans and/or college majors?**

   All three students who participated in the pilot test indicated that they were pursuing a career they interned through the WISE Program. Two had their career choice/college major confirmed, while one modified his career choice/college major from physical training to physical education. All three students also indicated that the primary purpose for selecting WISE was to help them determine whether they wanted in a career in their particular area of interested.

2. **What impact did programs at Walter Panas High School have on Non-Participating Students regarding their decision future career choices and/or college majors?**

   The Non-Participating Students are the students who did not choose to participate in the WISE Program while in high school. These students followed the conventional path of completing their high school education. Three non-participating students participated in this pilot test. These students responded to a survey question to determine what activities and programs offered at Walter Panas High School had an impact on their decision-making regarding a career choice and/or college major. The survey question provided a list of activities and programs, and the students were to respond to the list with a Yes or No Answer. All three students (100%) responded Yes to their attendance at the career fair. Two students (67%) reported using the Career Center located in the guidance, while one student (33%) indicated using technology in exploring possible future careers. All students (100%) responded to speaking to their counselors about their career plans.
Even though the students did not participate in the WISE Program, all three (100%) had made a choice regarding their future career or college major based on their experience in high school and were very definitive about their choice.

3. What were the most frequent goals achieved in the WISE Program from the perspective of its program participants?

All surveys provided to the program participants delineated four broad goals to be achieved for its student participants. These goals are to provide students with: (1) an opportunity for career exploration and development (learning the specifics of a particular career choice; (2) an opportunity to apply their skills and knowledge outside the classroom in an area of special interest; (3) an opportunity to develop independence, self-direction, self-reliance, and confidence; (4) an opportunity to develop and improve interpersonal skills and relationships; and (5) an opportunity to learn about and use community resources as an extension of traditional education.

The three WISE Alumni indicated that the goal most frequently achieved by the program was the opportunity for career exploration and development. The three school-based mentors, who participated in the pilot test, reported that the goal most frequently achieved from their perspective was the opportunity for students to develop independence, self-direction, self-reliance, and confidence. The two-work-based mentors, who participated in the pilot test, were in agreement with the students regarding the career exploration and development goal as the most frequent goal achieved.

Although the WISE Alumni and work-based mentors were in agreement regarding the most frequently achieved goal, there was a departure regarding the frequency achieved of the remaining goals. Two of the WISE Alumni ranked application skills and
knowledge outside the classroom as the second most frequently achieved goal, while the third student indicated gaining self-confidence as the second most frequently achieved goal. All three students rank their improvement of interpersonal skills as the third most frequent goal achieved. All three students ranked the goal of learning to use the community as a resource as part of their education as the least frequently achieved goal.

The school-based mentors ranked the career exploration and development goal as the next most frequently achieved goal. The third and fourth goal most frequently achieved according to the school-based mentors were the opportunity to develop and improve interpersonal skills and relationships, and the opportunity to apply skills and knowledge outside the classroom, while ranking the use of the community as part of a student’s education as the least frequently achieved goal.

According to the work-based mentors, the second most frequently achieved goal was providing students with the opportunity to develop independence, self-direction, self-reliance and confidence. The third and fourth goal most frequently achieved according to the work-based mentors was the opportunity for students to apply their skills and knowledge outside the classroom, and the opportunity to develop and improve interpersonal skills and relationships. This fourth rank goal was also an area of agreement in ranking with the WISE Alumni, while ranking the use of the community as part of a student’s education as the least frequently achieved goal.

4. **What skills and benefits did students derive by their participation in the WISE Program?**

In the pilot test school-based mentors were given a list of seven benefit experiences a student would have in their participation in the WISE Program. They were
to rank the benefit experiences from seven to one with seven being the highest benefit experienced. All three school-based mentors ranked the career exploration (100%) as the highest ranked benefit experience. However, according to two of the school-based mentors (67%) gaining self-confidence and students taking responsibility for their own learning were the highest benefit experiences. The benefits of learning about a particular topic, the world of work and problem-solving and decision-making skills were mentioned approximately by one of the mentors (33%).

The survey for school based mentors listed six skills, and they were asked to rank these skills from six to one with six being the highest skilled developed. All three school-base mentors (100%) indicated that the highest ranked skill developed by the students was working with adults and peers.

The two work-based mentors in the pilot test were given a list of seven benefit experiences a student would have in their participation in the WISE Program. They were to rank the benefit experiences from seven to one with seven being the highest benefit experienced. The two work-based mentors (100%) ranked the developing a better understanding of a particular career possibility as the highest ranked benefit experience.

The two parents and caregivers, who participated in the pilot test, were asked if they noticed any changes or improvement in the children’s attitudes and behaviors through their participation in the WISE Program. They were given a list of eight attitudes and behaviors that were related to the benefits and skills derived from the program. The parents and caregivers were asked to rank these attitudes and behaviors from eight to one with eight being the highest observed improvement. Both parents/caregivers ranked the development and improvement in their child’s interpersonal skills and relationships as
the highest ranked improvement. In addition, they observed improvements regarding greater independence, self-direction, self-reliance and confidence.

5. What were the satisfaction levels achieved by the WISE Program from the perspective of its participants?

All of the WISE Program participants (students, school-based mentors, work-based mentors, and parents) in the pilot test indicated a great deal of satisfaction with the program. Each stakeholder was asked for their degree of satisfaction with the Program which was based on a 3 point Likert scale of Satisfied (3), Satisfied, but have recommendations (2), and Not Satisfied (1).

All three WISE Alumni indicated a 100% satisfaction with the program. The M for this question was at 3.0. Two of the three school-based mentors (67%) indicated their satisfaction with the program, while one (33%) indicated program satisfaction but had recommendations to improve the program. The M for this question was at 2.67. All two work-based mentors indicated 100% satisfaction with the program. The M for this question was at 3.0.

An additional question was asked of work-based mentors regarding their willingness to participate in the program the following year. This question was asked on a 3-point Likert scale of Definitely Participate (3), Probably Participate (2), and Not Participate (1). All two work-based mentor respondents (100%) would definitely participate in the program. The M for this question was at a 3.0 participation rate.

Both parents/caregivers indicated they were 100% satisfied with the WISE Program. The M for this question was at 3.0 rate of satisfaction.
6. What recommendations can be made to the WISE Program in order to improve the effectiveness of the program for its student participants?

Although all stakeholders were satisfied with the WISE Program, they were able to make some recommendations. The WISE Alumni emphasized that the weekly seminar (WISE Wednesdays) could be improved by involving students in the program planning. Some suggestions regarding the WISE Wednesdays are to schedule guest speakers on a variety of topics generated by WISE students. Students felt strongly about having their school-based mentors visit the work sites.

School-based mentors felt that more time was needed in their schedule to effectively mentor students and visit the internship sites to collaborate with the work-based mentors. In addition, they suggested the need to effectively address the journal-writing requirement for the Program.

Work-based mentors recommended that school-based mentors make more visitations to the work-site. The work-based mentors expressed the need for more flexibility in the time students spent at the work site, and to provide students with the option of doing their presentations at the internship site rather than at the school.

Parents and caregivers in the pilot test did not offer any recommendations.

Data Analysis

The purpose of qualitative research is to produce findings. According to Patton (1989), "The challenge is to make sense of massive amounts of data, reduce the volume of information, identify significant patterns, and construct a framework for communicating the essence of what the data reveal" (p. 372). This researcher will
organize the data, look for patterns, check emerging patterns against the data, cross-
validate data sources and findings, and make linkages among various parts of the data
collected from the various stakeholder groups.

The student participants, school-based mentors, work-based mentors, and
parents/caregivers surveys have the same 3-point Likert scale question regarding their
individual satisfaction levels with the WISE Program, “Satisfied, Satisfied but have
recommendations, or Not Satisfied.” The response to this closed-ended type of question
will help determine the satisfaction levels of all four-stakeholder groups. In addition,
immediately following the Likert scaled question is an open-ended response question of
“What recommendations, if any, would you offer to improve the overall WISE Program?”
The responses to this question will provide the researcher emerging patterns and linkages
among all stakeholder groups, as well as immediate data to aid in program improvement.

The student participants, school-based mentor, and work-based mentor surveys
have a listing of the five goals of the WISE Program: (a) An opportunity for career
exploration and development; (b) An opportunity to apply skills and knowledge outside
the classroom in an area of special interest; (c ) An opportunity to develop independence,
self-direction, self-reliance, and confidence; (d) An opportunity to develop and improve
interpersonal skills and relationships; and (e) An opportunity to learn about and use
community resources as an extension of traditional education. Each stakeholder is to rank
on a Likert scale of 1 to 5, with 5 being the most important, the goals that were most
frequently achieved by the program. The response to this question will enable the
researcher to determine the frequency of the goals met by the program from the vantage
points of the three stakeholders most intimately involved with the Program. The analysis
of the results of this question will enable the researcher to reassess the goals of the program prior to replication in other schools.

The student participants and non-participating students survey asked one similar question that was a simple Yes or No response. Student participants were asked, "Are you currently pursuing a career or selected a college major based on your experience in the WISE Program?" Non-participating students were asked, "Are you currently pursuing a career or selected a college major based on your experience in high school?" The analysis of the data collected from this response will enable the researcher to determine the influence of the WISE program on student selection of a future career and/or college major.

A case record of each stakeholder group in the WISE program and non-student participants group will be written. The purpose of this case record is to organize the data collected into a comprehensive package in order to analyze the unique but yet convergent vantage points of each stakeholder group. Examples of the various data collected includes for student participants, reasons for choosing their WISE project, their mentors, and rating the value of the program. For non-participants, reasons for not participating in the WISE Program, the high school programs that provided career information, their reasons for selection of a prospective career, and rating their high school experience. For school-based mentors, the value of participating in the WISE Program in comparison to the traditional program, ranking skills that students achieved, and the ranking activities they performed as mentors. For work-based mentors, the ranking of experiences provided for the students, and the positive and negative aspects of being a mentor. For
parents/caregivers, ranking the frequency of certain attitudes and behaviors in their child, and their satisfaction with the program.

Once the case record of each stakeholder group is organized and written, the process of inductive analysis will be employed. Qualitative data analysis tends to be primarily an inductive process of organizing data into categories and identifying patterns and relationships among the categories according to McMillian & Schumacher (1993). These patterns emerge from the data rather than being imposed on the data. In addition, it becomes important to look for any variation in the data. This variation involves paying particular attention to how the stakeholders responded to and were affected by the WISE Program from their various perspectives.

Leedy (1997) indicates that there are three approaches to analyzing case study data: interpretational, structural, and reflective analysis. Gall (1996 as cited in Leedy) explains that:

Interpretational analysis refers to examining data for constructs, themes, and patterns that can be used to describe and explain the phenomenon studied.

Structural analysis refers to searching the data for patterns inherent in discourse text, events, or other phenomena, with little or no inference made as to the meaning of the patterns. Reflective analysis refers to using primarily intuition and judgement to portray or evaluate the phenomenon. (p.158)

When dealing with the analysis of qualitative data, the researcher must confront the problem of convergence, which means determining what and how things fit together. After determining the convergence of the data, a system of classifying the data is
developed. The classification systems are then prioritized to determine which category systems are more important than others.

The researcher must then confront the problem of divergence, which deals with examining the patterns and categories. Guba and Lincoln (1981) suggest that this is done by processes of extension (building on items already known), bridging (making connections among different items), and surfacing (proposing new information that ought to fit and then verifying its existence). The end of the process occurs when sets of categories have been saturated so that new sources lead to redundancy when regularities have emerged that feel integrated, when the analysis begins to go beyond the boundaries of the issues and concerns guiding the analysis, and when sources of information have been exhausted.

The challenge of this qualitative case study is to make sense of the massive amounts of data collected from the various stakeholder constituents, reduce the volume of information, identify significant patterns, and construct a framework for communicating the essence of what the data reveal.

Triangulation of the data is employed to “contribute to the verification and validation of qualitative analysis” (Patton, 1989, p. 464). Using the methods of triangulation to explore the consistency of the findings supports the credibility of the findings. If similar themes are noted in data collected from a variety of sources, the credibility of the interpretation is enhanced.

The focus group discussions and the analysis of a sampling of student journals will help provide the triangulation of data for this study. The focus group discussions will be held at a neutral site, and there will be 3 to 6 participants randomly selected from
the various stakeholder groups in WISE (students, school-based mentors, work-based mentors, parents/caregivers). The focus groups should last no longer than 45-minutes, and will be audio taped.

The data collected from the survey questionnaires will be analyzed through the use of the central tendency of the data by means analysis. The data collected from the survey questionnaire will be presented by a question analysis that pertains to the research questions of this study. These analyses will be presented in a tabular format, and selected analysis will be presented with the use of bar graphs. General commentary data provided through the open-response question will be summarized and also presented in a tabular format. The data collected from focus groups and a sampling of student journals will be summarized and reported in written format to assure the data triangulation.
Chapter IV
Analysis and Presentation of Data

The purpose of this dissertation is to determine what influence the Walter Panas High School Individualized Senior Experience (WISE) program has on the selection of career choices and/or college majors of its student participants in comparison to non-participating students in the graduating classes from 1996 through 1999. The findings of this study will provide an in-depth program evaluation that will lead to program improvement and replication in other schools. Based on questionnaires, telephone interviews, focus group discussion, and student journals, the data compiled will yield answers to the following research questions:

1. What impact did the WISE program have on students regarding their decision making about their future career plans and/or college majors?

2. What impact did programs at Walter Panas High School have on Non-Participating Students regarding their decision making about their future career choices and/or college majors?

3. What were the most frequent goals achieved in the WISE program from the perspective of its program participants (students, school-based mentors, work-based mentors)?

4. What skills and benefits did students derive by their participation in the WISE Program?
5. What were the satisfaction levels achieved by the WISE program from the perspective of its participants (students, school-based mentors, work-based mentors, parents/caregivers)?

6. What recommendations can be made to the WISE program in order to improve the effectiveness of the program for its student participants?

In the pages that follow, responses from the various participants are presented and analyzed. The development and presentation of patterns and common themes from all participants in the WISE Program will deliver an evaluative study that will have a direct impact in providing positive program improvement. The overall analysis of the data collected will ultimately provide the feedback that program coordinators and planners may utilize to enhance student participation and replication in other schools.

The data will be presented using five distinct groups: the WISE alumni who are the students who participated in the program; the school-based mentors who provided the student participants with advice and guidance at their home school; the work-based mentors who provided the sites for students to conduct their internships, as well as their guidance and expertise; the parents and caregivers who supported the entire program through their input and permission in allowing students to participate; and the non-participating students whose input through the surveys provided insight into their feelings, reasons, and thoughts regarding their non-participation in the WISE Program.

Data Collection

Five surveys were distributed during March of 2000 to WISE alumni, school-
mentors, work-based mentors, parents/caregivers, and non-participating students.
Although there were five different surveys, the four stakeholder groups in the WISE Program had several common questions. The WISE alumni, school-based mentors, and work-based mentors were presented with the goals of the WISE Program, and were to rank each goal from 1 to 5, with 5 being the highest frequency of success in goal achievement. All surveys asked respondents their satisfaction levels with the program. The degrees of satisfaction were Satisfied, Satisfied with Recommendations, and Not Satisfied. A comment section was provided in various areas of the surveys for open response and recommendations.

The survey questionnaire was prepared by the researcher based on a survey instrument created by the National Center for Restructuring Education, Schools, and Teaching (NCREST). The survey was helpful, but it did not completely address the purpose of this dissertation, which is to determine what influence the WISE Program has on the selection of career choices/majors of its student participants in comparison to non-participating students. The researcher prepared the essence of the survey with the NCREST survey used as a resource. After the pre-testing, only slight modifications were made to the survey questionnaires.

Since this study involved five different cohorts of respondents, this researcher distributed the surveys by first class mail, which included a stamped, self-addressed envelope. The survey for school-based mentors was delivered through the school district’s courier system; therefore, it was unnecessary to provide school-based mentors with a stamped, self-addressed envelope. Each participant received a cover letter attached to the survey that explained how participation was voluntary and that all
information would be kept anonymous and confidential. The approximate time for proper completion of the survey instrument for WISE alumni, school-based mentors, and non-participating students was 10 to 15 minutes. The approximate time for proper completion of the survey instrument for work-based mentors and parent/caregivers was 5 to 10 minutes. This was due to the number of questions on each survey and provision of open-ended response questions versus closed-ended response questions. The surveys were returned to the researcher by first-class mail and/or the school district courier system.

Each survey was color-coded utilizing blue for WISE alumni, green for school-based mentors, yellow for parent/caregivers, aqua for work-based mentors, and pink for non-participating students. Besides being color-coded each survey was numbered with a prefix of the year of graduation or participation in the program, e.g., 96-1, 96-2, 97-1, etc.

The researcher requested that the participants return the surveys by the first week in April, and most of the returns came in during the first three weeks of March. Follow-up telephone calls were made by the researcher to non-respondents, which prompted additional returns during the first two-weeks of April. An additional follow-up telephone call was made in mid-April, and data was collected through telephone interview using the survey questionnaires. All surveys were secured at the same location and were viewed by this researcher and a statistician who assisted the researcher in collating the data.

Focus group discussions were held from May through October, 2000 by invitation to a randomly selected group of subjects from each stakeholder category (WISE alumni, school-based mentor, work-based mentor, and parent/caregiver). The subjects were invited by telephone contact, and asked to come to a convenient site to participate in the
discussion. Sites used for these discussions were the Conference Room at Walter Panas High School and the Seven Stars Diner in Shrub Oak, New York. There were four different focus groups with three to six participants in each. The focus groups lasted no longer than an hour, and were audio taped. No one objected to being audio taped. The purpose of the focus group was to obtain data from another source to triangulate the data collected from the survey questionnaire.

Treatment of Survey Data

In this study, the number of surveys distributed was 584. This number reflects 172 WISE alumni, 172 parents/caregivers, 85 work-based mentors, 55 school-based mentors, and 100 non-participating students, a random sample of 25 students from each graduating class from 1996-99. The returns indicate the following participation rates: WISE alumni, 61 (35%); school-based mentors, 55, (76%); work-based mentors, 34 (40%); parents/caregivers, 26 (15%); and non-participating students, 31 (31%). While non-respondents can potentially cause problems for questionnaire interpretations, the representative numbers from each participating cohort group provided adequate representation from the sample population to ensure sufficient statistical sensitivity.

In descriptive statistics, numbers, percentages, and decimals are used to comprehend raw data. Only when the data is summarized are conclusions drawn from the raw data. This study utilized the central tendency of the data. The mean, which is the most frequently used indicator of central tendency (Witte and Witte, 1997), was analyzed. Each survey presented statements that participants responded to with a Likert scale. The statements and the Likert scale vary depending on the particular cohort survey.
However, there was one common statement on all cohort participant surveys, to which cohort participants responded on a 3-point Likert scale of Satisfied (3) to Not Satisfied (1).

In the WISE alumni survey, there are ten statements asking participants to respond to a 5 point Likert scale of “Strongly Agree” (5) to “Does Not Apply” (1). In addition, there is a checklist pertaining to the statements on why a student chose his/her particular internship.

The non-participating student survey asks students who do not participate in the WISE Program how definitive they were about their career choice or college major by responding to a 3 point Likert scale of “Very Definite” (3) to “Not Sure” (1). In addition, they were asked to determine the degree of importance they placed on a listing of ten reasons on why they chose their career choice or preference by responding to a 4 point Likert scale of “Very Important” (4) to “Not Important” (1). Finally they were asked to evaluate their degree of confidence in their ability to find a job in their career area by responding to a 3 point Likert scale of “Very Confident” (3) to “Not Confident” (1).

The school-based mentor survey asks mentors to respond to seven statements regarding the benefits of the program to students by responding to a 7 point Likert scale of “Highest benefit” (7) to “No benefit” (1). School-based mentors were also asked to determine the highest skills developed and achieved by their students by responding to six statements to a 6-point Likert scale of “Highest skill achieved” (6) to “Not Achieved” (1). In addition, they were asked to analyze six activities that they did with their students, and respond to these skills on 6 point Likert scale of “Highest frequency of activity” (6) to “No activity” (1).
The work-based mentor survey asks mentors to respond to seven statements regarding the benefits of the program to students by responding to a 7 point Likert scale of “Highest benefit” (7) to “No benefit” (1). Work-based mentors were also asked to rate their level of satisfaction with their student by responding to a 3 point Likert scale of “Very Satisfied” (3) to “Not Satisfied” (1). In addition, work-based mentors were asked to respond to their likelihood of continuing to participate in the WISE Program in the future by responding to a 3 point Likert scale of “Definitely Participate” (3) to “Will not participate” (1).

The parent/caregiver survey asks parents and caregivers to respond to the improvement in the attitudes and behaviors of their child by responding to eight statements to an 8-point Likert scale of “Highest Frequency of Improvement” to “No Improvement” (1). Parents and caregivers were asked to respond to the satisfaction levels that their child appeared to have with the WISE Program by responding to a 3 point Likert scale of “Very Satisfied” (3) to “Not Satisfied” (1). In addition, they were asked if they would recommend the WISE Program to other parents for their children by responding to a 3 point Likert scale of “Definitely Recommend” (3) to “Not Recommend” (1).

Discussion on Central Tendency of the Data

The WISE Alumni Survey

The WISE alumni are the students who have participated in the WISE Program from the 1995-96 through the 1998-99 school years. They were asked to complete a survey of 15 questions, which included five closed-ended questions and ten open
response questions. The first part of the discussion of the results of this survey will center on the five closed-ended questions. The data derived from each of these questions was analyzed as to its mean, standard deviation, percentile, and whether the data shows a pattern of significance to this study.

Please rank the reason statement listed below from 1 to 5 with 5 being the most important reason statement that made you decide to participate in the WISE Program.

The sixty-one respondents to this question ranked each of the reason statements according to the most important reason why they chose to participate in the WISE Program and their respective means (M) and standard deviation are presented below:

Table 1

<table>
<thead>
<tr>
<th>Reason Statements</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>An opportunity for career exploration and development (learning the specifics of a particular career choice).</td>
<td>4.20</td>
<td>1.26</td>
</tr>
<tr>
<td>An opportunity for me to apply my skills and knowledge outside the classroom in area of special interest.</td>
<td>3.84</td>
<td>1.10</td>
</tr>
<tr>
<td>An opportunity for me to develop independence, self-direction, self-reliance, and confidence.</td>
<td>3.48</td>
<td>1.15</td>
</tr>
<tr>
<td>An opportunity to develop and improve interpersonal skills and relationships. An opportunity to learn about and use community resources as an extension of traditional education.</td>
<td>3.10</td>
<td>1.29</td>
</tr>
<tr>
<td></td>
<td>2.34</td>
<td>1.49</td>
</tr>
</tbody>
</table>

According to 62.3% of the WISE Alumni, the career exploration and development reason statement was the primary reason for participating in the WISE Program. The
opportunity to apply skills and knowledge outside the classroom is the next most frequent reason to participate according to 36.1% of the respondents. The reason statement regarding the independence, self-direction, self-reliance, and confidence was named as the most important reason by 19.7% of the respondents. The developing and improving interpersonal skills and relationships reason was named as the most important reason by 16.4% of the respondents. The reason statement to learn about and use community resources was named as the most important reason by 14.8% of the respondents. The resulting percentages may not be significant since several WISE Alumni respondents ranked all reason statements as the most important reason (5) for participating in the WISE Program.

Why did you choose to do your particular WISE project? Check the statement or statements that most accurately describe the reasons for your choice. You may check more than one statement.

Sixty-one WISE Alumni responded to this question. The statements most frequently checked as their reasons for selecting their WISE project are presented in percentile format below:

Table 2

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To find out whether I wanted a career in this field.</td>
<td>52</td>
<td>85.2%</td>
</tr>
<tr>
<td>To get experience that would help me get a job after high school.</td>
<td>36</td>
<td>59.0%</td>
</tr>
<tr>
<td>To improve myself in this area.</td>
<td>31</td>
<td>50.8%</td>
</tr>
</tbody>
</table>
Something I enjoyed doing, even though I didn’t expect to make it my career choice.  

<table>
<thead>
<tr>
<th>Reason</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>To make a difference in my school and community.</td>
<td>4</td>
<td>6.6%</td>
</tr>
<tr>
<td>A friend was doing a similar project.</td>
<td>2</td>
<td>3.3%</td>
</tr>
<tr>
<td>My mentor suggested it.</td>
<td>2</td>
<td>3.3%</td>
</tr>
<tr>
<td>My teacher suggested it.</td>
<td>5</td>
<td>8.2%</td>
</tr>
<tr>
<td>Another Reason</td>
<td>17</td>
<td>27.9%</td>
</tr>
</tbody>
</table>

The reason for career awareness and development was the most frequently checked reason for WISE Alumni to select their WISE Project. Seventeen respondents checked “Another Reason” other than the statement listed on the survey as one of their reasons for selection. However, fourteen of these respondents (95.2%) listed reasons that directly related to career awareness and development. For example, several of the respondents mentioned that they wished to learn more about the career prior to their entrance to college. Other reasons given by 4.8% of the respondents to this inquiry mentioned personal issues, such as family medical issues, etc.

Please rate the following statements to the extent to which you agree or disagree regarding what you experienced in the WISE Program. Use the following code: 5—Strongly Agree; 4—Agree; 3—Disagree; 2—Strongly Disagree; or 1—Does Not Apply.

Sixty-one of the WISE Alumni responded to this question. The results of the responses for each statement are presented with the percentile response, the \( M \), and standard deviation in the following tables:
Table 3

My WISE experience helped me decide on a career and/or college major.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>25</td>
<td>41.0%</td>
</tr>
<tr>
<td>Agree</td>
<td>23</td>
<td>37.7%</td>
</tr>
<tr>
<td>Disagree</td>
<td>8</td>
<td>13.3%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does Not Apply</td>
<td>5</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

Approximately 88.7% of the respondents agreed or strongly agreed with this statement with a M of 4.03 and SD of 1.14.

Table 4

I learned about my own strengths and weaknesses.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>15</td>
<td>24.6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>62.3%</td>
</tr>
<tr>
<td>Agree</td>
<td>38</td>
<td>6.6%</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does Not Apply</td>
<td>4</td>
<td>6.6%</td>
</tr>
</tbody>
</table>
Approximately 86.9% of the respondents agreed or strongly agreed with this statement with a $M$ of 3.98 and SD of .96.

Table V

**I learned about the World of Work.**

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>13</td>
<td>21.3%</td>
</tr>
<tr>
<td>Agree</td>
<td>32</td>
<td>52.5%</td>
</tr>
<tr>
<td>Disagree</td>
<td>9</td>
<td>14.8%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>5</td>
<td>8.2%</td>
</tr>
<tr>
<td>Does Not Apply</td>
<td>2</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

Approximately 73.8% of the respondents agreed or strongly agreed with this statement with a $M$ of 3.80 and SD of .98.

Table 6

**I developed new skills.**

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>21</td>
<td>34.4%</td>
</tr>
<tr>
<td>Agree</td>
<td>33</td>
<td>54.1%</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>4.9%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

Approximately 88.5% of the respondents agreed or strongly agreed with this
statement with a $M$ of 4.13 and SD of .90.

Table 7

*I benefited from a greater degree of independence.*

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>25</td>
<td>41.0%</td>
</tr>
<tr>
<td>Agree</td>
<td>25</td>
<td>41.0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>8.2%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Does Not Apply</td>
<td>4</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Approximately 82% of the respondents agreed or strongly agreed with this statement with a $M$ of 4.07 and SD of 1.11.

Table 8

*I took more responsibility for my own learning.*

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>24</td>
<td>39.3%</td>
</tr>
<tr>
<td>Agree</td>
<td>32</td>
<td>52.5%</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>4.9%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

Approximately 91.8% of the respondents agreed or strongly agreed with this statement
with a $M$ of 4.26 and SD of .07.

Table 9

I became more interested in my school work.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>8</td>
<td>13.1%</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>34.4%</td>
</tr>
<tr>
<td>Disagree</td>
<td>20</td>
<td>32.8%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>6</td>
<td>9.8%</td>
</tr>
<tr>
<td>Does Not Apply</td>
<td>6</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

Approximately 47.5% of the respondents agreed or strongly agreed with this statement, while 42.6% of the respondents disagreed or strongly disagreed with this statement. This statement scored a $M$ of 3.31 and SD of 1.13.

Table 10

My school-based mentor was helpful to me.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>41</td>
<td>67.2%</td>
</tr>
<tr>
<td>Agree</td>
<td>15</td>
<td>24.6%</td>
</tr>
<tr>
<td>Disagree</td>
<td>3</td>
<td>4.9%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>3</td>
<td>4.9%</td>
</tr>
</tbody>
</table>
Does Not Apply

Approximately 91.8% of the respondents agreed or strongly agreed with this statement with a $M$ of 4.56 and SD of .74.

Table 11

My work-based mentor was helpful to me.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>31</td>
<td>50.8%</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>34.4%</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>6.6%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1</td>
<td>1.6%</td>
</tr>
<tr>
<td>Does Not Apply</td>
<td>4</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Approximately 85.2% of the respondents agreed or strongly agreed with this statement, with a $M$ of 4.20 and SD of 1.10.

Table 12

What I learned could not have been learned through my regular classes.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>31</td>
<td>50.8%</td>
</tr>
<tr>
<td>Agree</td>
<td>21</td>
<td>34.4%</td>
</tr>
<tr>
<td>Disagree</td>
<td>4</td>
<td>6.6%</td>
</tr>
</tbody>
</table>
Strongly Disagree 1 1.6%
Does Not Apply 4 6.6%

Approximately 85.2% of the respondents agreed or strongly agreed with this statement, with a $M$ of 4.20 and SD of 1.10.

The Summary of Means Table for all these statements are displayed in Table 13. Each of the statements of experience was responded to by WISE Alumni with the number 5 as being the strongest agreement with statement ranging to number 1 as not applying to their experience in the WISE Program. The statements of experience are ranked by their mean from the highest mean to the lowest are presented below:

Table 13

Summary of Means for Statements of Experience

<table>
<thead>
<tr>
<th>Statement of Experience</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>My school-based mentor was helpful to me.</td>
<td>4.56</td>
</tr>
<tr>
<td>I took more responsibility for my own learning.</td>
<td>4.26</td>
</tr>
<tr>
<td>What I learned could not have been learned through my regular classes.</td>
<td>4.20</td>
</tr>
<tr>
<td>My work-based mentor was very helpful to me.</td>
<td>4.20</td>
</tr>
<tr>
<td>I developed new skills.</td>
<td>4.13</td>
</tr>
<tr>
<td>I benefited from a greater degree of independence.</td>
<td>4.07</td>
</tr>
<tr>
<td>My WISE experience helped me decide on a career and/or college major.</td>
<td>4.03</td>
</tr>
<tr>
<td>I learned about my own strengths and weaknesses</td>
<td>3.98</td>
</tr>
<tr>
<td>I learned about the world of work.</td>
<td>3.80</td>
</tr>
</tbody>
</table>
I became more interested in school.

WISE Alumni had a tendency to have strong agreement with the helpfulness of their school-based mentor, and to agree that they took greater responsibility for their own learning. In addition, the alumni showed agreement in their experience with learning more by working outside the traditional classroom concept; helpfulness of their work-based mentor; developing new skills; benefiting from independence; and helping their decision making regarding their future career or college major. A tendency of disagreement seems to occur more with learning about their individual strengths and weaknesses, as well as learning the fundamentals of the world of work. However, the M for these experience statements tended to be in the range of 3.98 and 3.80, which leans toward more agreement than disagreement. The experience statement of becoming more interested in school showed the greatest disagreement among alumni with a M of 3.31. The overall average of the M for these statements is 4.05, which shows an agreement with the experience in the program.

*Are you currently pursuing a career or college major based on your experience in WISE?* There were sixty-one respondents to the question, 63.9% responded Yes while 36.1% responded No.

*Did WISE have an influence on your decision to pursue or not to pursue a career or college major?* The sixty-one respondents to the questions, 77.8% responded that WISE had made both a positive and negative influence on their decision.

*Based on your experience with the WISE Program, were you: Satisfied (3), Satisfied, but have recommendations (2), or Not Satisfied (1) with the Program.*
Sixty-one WISE Alumni responded to this question with 78.7% satisfied, 19.7% satisfied but have recommendations, and 1.6 not satisfied with the WISE Program. WISE Alumni expressed an overall total satisfaction level with the WISE Program at 98.4%. The M for this question was at 2.76 satisfaction level with a SD of .47. The WISE Alumni appear to have been satisfied with WISE, but several who were satisfied and offered recommendations to improve WISE:

Table 14

Summary of Recommendations

- More emphasis in improving the weekly seminar (WISE Wednesdays).
- More student involvement in the planning of the program.
- The program should be for a longer period of time.
- More careful monitoring of students at the work site.
- The District should provide transportation to work sites.
- Work-based mentors should be more involved with the presentations.
- There should be more guest speakers during the weekly seminars.
- WISE Wednesdays should meet every other week.
- More time should be allowed for projects.
- School-based mentors should visit the work sites.
- There should be more required mentor meetings.
- WISE Wednesdays should deal more with special skills of the real world.
Several WISE Alumni chose to make some additional comments endorsing the value of the program. Their supportive comments added credence to the value of the overall program. Comments ranged from it was a great experience and the most valuable and memorable thing they ever did in high school to improving their self-esteem.

The Non-Participating Alumni Survey

The Non-Participating Alumni are the students who did not participate in the WISE Program during the academic school years from the 1995-96 through the 1998-99 school years. A random sample of twenty-five alumni from each of the academic school years was selected to participate in the survey. They were asked to complete a survey of eight questions, which included six closed-ended questions and two open response questions. The first part of the discussion of the results of this survey will center on the six closed-ended questions. The data derived from each of these questions is analyzed as to its mean, standard deviation, and percentile, whether the data show a pattern of significance to this study.

Please answer Yes or No from the following list of activities that you participated in or experienced during your high school career. There were 29 respondents to this question. The activities listed were specifically geared toward career awareness and exploration activities provided through the Walter Panas High School academic and/or guidance program. The percentage analysis for each activity appears below.

Table 15

Career Awareness and Exploration Activities at Walter Panas High School
<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance at a career or job fair.</td>
<td>89.7%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Guest speakers came to class to talk about careers.</td>
<td>34.5%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Took a field trip to a place of business.</td>
<td>27.6%</td>
<td>72.4%</td>
</tr>
<tr>
<td>Participated in a job shadow program.</td>
<td>6.9%</td>
<td>93.1%</td>
</tr>
<tr>
<td>Completed a career interest inventory.</td>
<td>31.0%</td>
<td>69.0%</td>
</tr>
<tr>
<td>Used career exploration software.</td>
<td>48.3%</td>
<td>51.7%</td>
</tr>
<tr>
<td>Participated in an internship</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Used the services of the Career Center.</td>
<td>51.7%</td>
<td>48.3%</td>
</tr>
<tr>
<td>Was advised about careers by my guidance counselor</td>
<td>24.1%</td>
<td>75.9%</td>
</tr>
</tbody>
</table>

The majority of activities experienced by the Non-Participating Alumni regarding career exploration and awareness services were through the Career Fair (89.7%) and the use of the Career Center (51.7%) located in the Guidance Department. A number of other activities such as participating in an internship (0%) and a job shadow (6.9%) were very low or non-existent activities experienced by the respondents. Of particular concern was the low activity experienced regarding career counseling services provided directly by a guidance counselor (24.1%).

**Are you currently pursuing a career or selected a college major based on your experience in high school?** Of the twenty-nine respondents to this question, 34.5% responded Yes and 65.5% responded No. Even though the respondents had limited career awareness and exploration activity experience in high school, approximately one-third
had made a choice regarding their future career or college major based on their experience in high school.

How definite are you about your career choice and/or college major? This question required a response from a range of 3—Very Definite, 2—Somewhat Definite, and 1—Not Sure at All. The 29 respondents to this question indicated that 55.2% were very definite about their choice, 24.1% were somewhat definite, while 17.2% were not sure at all. Approximately 79.3% of the respondents were clearly definite about their choice with an $M$ of 2.39 and SD of .79. There was a clear trend of decisiveness about their choices of career and/or college major.

From the list below, please check your reasons why you did not participate in the WISE Program while in high school. If the reason does not appear, you may make a response in the space provided. The twenty-nine respondents indicated their responses, and several provided additional clarification for the check response. The percentage analysis of the results appears below:

Table 16:

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule conflicts with other courses</td>
<td>12</td>
<td>41.4%</td>
</tr>
<tr>
<td>Lack of information or guidance about the program</td>
<td>9</td>
<td>31.0%</td>
</tr>
<tr>
<td>Felt program was not geared for college bound students</td>
<td>6</td>
<td>20.7%</td>
</tr>
<tr>
<td>No interest in participating</td>
<td>2</td>
<td>6.9%</td>
</tr>
</tbody>
</table>
Several respondents indicated that in addition to scheduling conflicts with other courses, they also had personal conflicts with their participation in extra-curricular activities and interscholastic athletics or after-school employment. Others clarified their response with concern for taking as many Advanced Placement courses as possible in order to be prepared for college. (See Appendix A, Chart E, page 189)

The School-Based Mentor Survey

The school-based mentors completed a survey of 13 questions, which included six closed-ended questions and five open response questions. The first part of the discussion of the results of this survey will center on the six closed-ended questions. The data derived from each of these questions is analyzed as to its mean, standard deviation, and percentile, whether the data show a pattern of significance to this study.

The goals of the WISE Program are listed below. Please rank each goal from 1 to 5 with 5 being the highest frequency of success your student met these goals. The 42 respondents to this question ranked each of the goals according to the highest frequency met by the WISE Program and their respective means (M) and standard deviation are presented below:

Table 17

Frequency of Program Goals Met by Student Participation in WISE Program

<table>
<thead>
<tr>
<th>Program Goals</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>An opportunity to develop independence, self-direction, self-reliance, and confidence.</td>
<td>4.24</td>
<td>1.08</td>
</tr>
</tbody>
</table>
An opportunity for career exploration and development (learning the specifics of a particular career choice)  
3.98 1.09

An opportunity to develop and improve interpersonal skills and relationships.  
3.71 1.09

An opportunity to apply their skills and knowledge outside the classroom in an area of special interest  
3.60 1.21

An opportunity to learn about and use community resources as an extension of traditional education.  
2.93 1.54

The development of student independence, self-direction, self-reliance, and confidence goal of the WISE Program was the most frequent goal met by the WISE Program according to 57.1% of the school-based mentor respondents. The career development and exploration goal was the next most frequent goal according to 38.1% of the school-based mentor respondents. The goals regarding the application of skills and knowledge outside the classroom and developing interpersonal skills were mentioned by 29.1% to 31.0% of the respondents, while the goal to learn about community resources as an extension of the classroom was mentioned by 19.0% of the respondents. The resulting percentages may not be significant since several school-based mentor respondents ranked all goals as highest frequency met (5).

In what ways do you think your student(s) benefited from their experience in WISE. Please rank the following statements from 1 to 7 with 7 being the highest benefit experienced.
Forty-two school-based mentors responded to this question. They ranked each of the benefits according to the highest benefit experienced by their students' participation in the WISE Program. The results are presented below:

Table 18

<table>
<thead>
<tr>
<th>Benefits</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explored a particular career possibility.</td>
<td>5.63</td>
<td>1.58</td>
</tr>
<tr>
<td>Gained more self-confidence.</td>
<td>5.22</td>
<td>1.75</td>
</tr>
<tr>
<td>Took responsibility for their own learning.</td>
<td>5.17</td>
<td>1.58</td>
</tr>
<tr>
<td>Learned about a particular topic or issue.</td>
<td>4.85</td>
<td>1.80</td>
</tr>
<tr>
<td>Learned about the world of work.</td>
<td>4.73</td>
<td>1.66</td>
</tr>
<tr>
<td>Learned problem solving and decision making skills.</td>
<td>4.54</td>
<td>1.63</td>
</tr>
<tr>
<td>Learned about the role of technology.</td>
<td>3.13</td>
<td>2.50</td>
</tr>
</tbody>
</table>

The highest benefits experienced by the students in the WISE Program according to 63.3% of the school-based mentor respondents concerned career exploration, gaining self-confidence, and students taking responsibility for their own learning. The benefits of learning about a particular topic, the world of work, and problem-solving and decision-making skills were mentioned approximately by 41.2% of the respondents. Learning the role of technology benefit was indicated by 14.3% of the highest benefits experienced by
students. The resulting percentages may not be significant since several school-based mentor respondents ranked all benefits experienced as highest benefit experienced (7).

*What skills were developed by your student(s) through their participation in WISE? Please rank these skills from 1 to 6 with 6 being the highest skill achieved.*

Forty-two school-based mentors who responded to this question, ranked each of the skills developed by their students' participation in the WISE Program. The results are presented below:

Table 19

<table>
<thead>
<tr>
<th>Skills</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with adults and peers.</td>
<td>5.02</td>
<td>1.19</td>
</tr>
<tr>
<td>Setting and adjusting goals.</td>
<td>4.32</td>
<td>1.52</td>
</tr>
<tr>
<td>Time Management Skills</td>
<td>4.27</td>
<td>1.52</td>
</tr>
<tr>
<td>Presentation Skills</td>
<td>4.10</td>
<td>1.71</td>
</tr>
<tr>
<td>Research Skills</td>
<td>3.90</td>
<td>1.45</td>
</tr>
<tr>
<td>Technology Skills</td>
<td>3.25</td>
<td>1.89</td>
</tr>
</tbody>
</table>

The highest skill developed by the students in the WISE Program according to 73.8% the school-based mentor respondents was the skill of learning to work with adults and their peers. The development of goals in the areas of setting and adjusting one’s goals, time management and presentation skills was mentioned as the highest skill.
developed by 52.4% through 54.8% of the respondents. The research and technology skills, although addressed by the program, were indicated by 30.0% of the respondents as the highest skills developed. The resulting percentages may not be significant since several school-based mentor respondents ranked all skills developed as the highest skills developed (6).

The purpose of the WISE Program is to provide a more meaningful, engaging, and useful conclusion to the senior year than provided by the conventional curriculum. Please comment on the value of this program for seniors during their final semester as students in high school.

The response by the school-based mentors to this question was very positive. The summary of the responses indicate that the program was an invaluable experience for students. The opportunity to provide students with real world experiences prior to graduation increased their personal growth by teaching them independence and responsibility that cannot always be replicated in the traditional classroom setting. The school-based mentors indicated that the dramatic benefit for students to experience a particular career area prior to graduation a complemented student’s high school experience. However, some comments were cautious in that it was not for all students. Concerns were raised regarding the monitoring of the program, and that high school is strictly for knowledge and not for obtaining jobs.

Based on your experience with the WISE Program, were you: Satisfied (3), Satisfied, but have recommendations (2), or Not Satisfied (1) with the Program.

Forty-two school-based mentors responded to this question with 71.4% satisfied, 23.8% satisfied but have recommendations, and 4.8% not satisfied with the WISE
Program. School-based mentors expressed an overall total satisfaction level with the WISE Program at 95.2%. The $M$ for this question was at 2.71 satisfaction level with a $SD$ of .51. The school-based mentors appear to be satisfied with WISE, but several were satisfied and offered recommendations to improve the WISE Program which are presented below:

Table 20

**Summary of Recommendations by School-Based Mentors**

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students should apply and be interviewed prior to the acceptance in the program.</td>
</tr>
<tr>
<td>Need to provide more time for the mentor to make visits to the site.</td>
</tr>
<tr>
<td>Provide adequate meeting time with the school-based mentors.</td>
</tr>
<tr>
<td>The program should be done in the summer before the senior year.</td>
</tr>
<tr>
<td>Mission of WISE is clear, but curriculum specifics should be clarified to all.</td>
</tr>
<tr>
<td>There should more school and community involvement.</td>
</tr>
<tr>
<td>I wish students could be more flexible with time at the work site.</td>
</tr>
</tbody>
</table>

The work-based mentors completed a survey of ten questions, which included five closed-ended questions and five open response questions. The first part of the discussion of the results of this survey will center on the five closed-ended questions. The data derived from each of these questions is analyzed as to its mean, standard deviation, and percentile, whether the data shows a pattern of significance to this study.
The goals of the WISE Program are listed below. Please rank each goal from 1 to 5 with 5 being the highest frequency of success your student met these goals. The 33 respondents to this question ranked each of the goals according to the highest frequency met by the WISE Program and their respective means (M) and standard deviation are presented below:

Table 21:

<table>
<thead>
<tr>
<th>Program Goals</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>An opportunity for career exploration and development (learning the specifics of a particular career choice).</td>
<td>4.57</td>
<td>.11</td>
</tr>
<tr>
<td>An opportunity to develop independence, self-direction, self-reliance and confidence.</td>
<td>4.30</td>
<td>.88</td>
</tr>
<tr>
<td>An opportunity to apply their skills and knowledge outside the classroom in an area of special interest.</td>
<td>4.10</td>
<td>1.16</td>
</tr>
<tr>
<td>An opportunity to develop and improve interpersonal skills and relationships.</td>
<td>4.10</td>
<td>1.27</td>
</tr>
<tr>
<td>An opportunity to learn about and use community resources as an extension of traditional education.</td>
<td>3.67</td>
<td>1.35</td>
</tr>
</tbody>
</table>

The career exploration and development goal of the WISE Program was the most frequent goal met by the WISE Program according to 63.3% of the work-based mentor respondents. The development of independence, self-direction, self-reliance and confidence goal was the next most frequent goal according to 46.7%. The goals regarding the application of skills and knowledge outside the classroom and the
opportunity to develop and improve interpersonal skills and relationships were tied
garding to the respondents and were mentioned 33.3% as the most frequent goal met.
The goal to learn about community resources as an extension of the classroom was
mentioned by 23.3% of the respondents. The resulting percentages may not be significant
since several work-based mentor respondents ranked all goals as highest frequency met
(5).

As a result of their work exploration experiences with your organization, in what
ways did the student(s) you supervised benefit? Please rank the following statement from
1 to 7 with 7 being the highest benefit experienced.

Thirty-two work based mentors responding to this question ranked each of the
benefits experienced by their students’ participation in the WISE Program. The results
are presented below:

Table 22

<table>
<thead>
<tr>
<th>Benefit Experienced</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed a better understanding of your field of work</td>
<td>6.2</td>
<td>1.27</td>
</tr>
<tr>
<td>Developed a better sense of the world of work</td>
<td>5.6</td>
<td>1.48</td>
</tr>
<tr>
<td>Improved self-confidence and sense of worth</td>
<td>5.4</td>
<td>1.74</td>
</tr>
<tr>
<td>Learned about specific strengths and areas in need of</td>
<td>5.4</td>
<td>1.99</td>
</tr>
<tr>
<td>growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquired job or career knowledge</td>
<td>5.3</td>
<td>2.13</td>
</tr>
<tr>
<td>Acquired a value of reliability and dependability</td>
<td>4.9</td>
<td>1.73</td>
</tr>
</tbody>
</table>
The development of better understanding of the work involved in the career field was the highest benefit experienced by the students in the WISE Program according to 53.3% of the work-based mentor respondents. The development of a better understanding of the world of work was the next highest benefit experienced mentioned by 40% of the respondents. The benefits experienced of improvement in self-confidence and learning about their specific strengths and areas in need of growth was indicated by 33.3% of respondents as the highest benefit experienced. The benefits of acquiring specific career knowledge, a value for reliability and dependability, and exhibiting great self-discipline was mentioned by 23.7% of the respondents as the highest benefit experienced. The resulting percentages may not be significant since several work-based mentor respondents ranked all benefits experienced as highest benefit experienced (7).

Overall, how satisfied were you with the student(s) you supervised? Very Satisfied (3), Satisfied (2), or Not Satisfied (1).

Thirty-three work-based mentors responded to this question with 70% being very satisfied, 26.7% being satisfied, and 3.3% being not satisfied. Work-based mentors expressed an overall total satisfaction level with the students they mentor at 96.7%. The M for this question was at 2.67 satisfaction level with a SD of .55. The work-based mentors appear more than satisfied with student knowledge and preparation for the internship experience.
If your organization is involved with the WISE program next year, what is the likelihood that you would participate? Definitely Participate (3) Probably Participate (2), or Not Participate (1).

Thirty-three work-based mentors responded to this question with 76.7% definitely participating, 13.3% probably participating, and 10% not participating. Work-based mentors expressed an overall total participation level with the WISE Program for the next academic year at 90%. The $M$ for this question was at 2.67 participation level with a $SD$ of .66. The work-based mentors appear to be more definitive regarding their participation in WISE providing those all important internship sites to sustain the program.

Based on your experience with the WISE Program, were you: Satisfied (3), Satisfied, but have recommendations (2), or Not Satisfied (1) with the Program.

Thirty-two work-based mentors responded to this question with 75% satisfied, 21.8% satisfied but have recommendations, and 3.2 not satisfied with the WISE Program. Work-based mentors expressed an overall total satisfaction level with the WISE Program at 96.8%. The $M$ for this question was at 2.72 satisfaction level with a $SD$ of .53. The work-based mentors appear to be satisfied with WISE, but several were satisfied and offered recommendations to improve the WISE are presented below:

Table 23

Summary of Recommendations by Work-based Mentors

Keep doing this program. It is a real plus for the school and community.

More schools should have this program and a longer amount of time.

Need to have more frequent visits by school-based mentors.
Have it sooner—even the last semester of the junior year.

Time sheets need to be provided so supervisors know how much time they put in.

Need to have a closer relationship between school-based mentor, student, and site.

Quality of research papers is disappointing. More preparation needed.

I wish students could be more flexible with time at the work site.

Students should be allowed to have on-site presentations versus only at school.

The purpose of the WISE Program is to provide a more meaningful, engaging, and useful conclusion for the senior year than provided by the conventional curriculum.

Please comment on the value of this program for seniors during their final semester as students in high school.

The response by work-based mentors to this question was very positive. The general feeling was that the program was very valuable by providing the opportunity to students to experience the "real world". Furthermore, the Program provided seniors with some insight for a particular career path, as well as integrating the school curriculum with direct work experience. The work-based mentors pointed out that WISE provided a bridge between school and work and helped seniors stay focused during the final semester of their senior year. There was praise for structure and organization of the program.

However, not all were pleased with the program. These comments generally provided criticism regarding the lack of communication from the school and also regarding student participants. Although these comments were few, they provided insight
into some flaws in the program that need to be addressed. Some typical comments, both positive and negative, are listed below:

Table 24

Summary of Comments made by Work-based Mentors

<table>
<thead>
<tr>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel the final semester is too late for some students to realize the importance of school as a foundation to the next level. However, any exposure to the &quot;real world&quot; is important.</td>
</tr>
<tr>
<td>It had value and meaning because the student started to question if she wanted to be a classroom teacher. Visiting our special programs made her realize how much preparation is necessary for teachers.</td>
</tr>
<tr>
<td>This program is a wonderful experience for those who are mature and motivated. I was fortunate enough to mentor an exceptional student. She gained practical experience and it reinforced her desire to become a teacher. She left for college with well-defined goals and added confidence.</td>
</tr>
<tr>
<td>The student I mentored gained knowledge, self-confidence, decision making skills, and time management. She gained self-esteem and achieved a level of performance that she did not think was possible.</td>
</tr>
<tr>
<td>High schools and colleges should have more opportunities like WISE for students. The student was an excellent participant and sought out both experiences and knowledge in the field.</td>
</tr>
</tbody>
</table>
Seniors seem to enjoy the program and have found it educational. However, the conventional curriculum that this is replacing cannot be ignored. I’ve been disappointed with the quality of some of the research papers.

Papers of poor quality have been receiving A’s. More attention should be paid towards research writing.

There were significant flaws in communication between the school and site, and I was very disappointed in the quality of student and lack of interest displayed.

Student’s inappropriate behavior, grammar and dress were highly unprofessional and gave a poor impression of what exactly the school and program was to accomplish.

The Parent/Caregiver Survey

The parents/caregivers completed a survey of ten questions, which included five closed-ended questions and five open response questions. The first part of the discussion of the results of this survey will be focused around the closed-ended questions that pertain to this study. The data derived from each of these questions is analyzed as to its mean, standard deviation, and percentile, whether the data shows a pattern of significance to this study.

As your child participated in the WISE Program, did you observe any changes or improvement in their attitudes and behaviors regarding their future? From the statement
listed below, please rank each statement from 1 to 8 with 8 being the highest frequency of improvement in your son/daughter's attitudes and behaviors.

There were 26 respondents to this survey and 23 responded to this question ranking the improvement in attitudes and behaviors according to the highest improvement observed in their son/daughter through their participation in the WISE Program. The types of improvement noted and their respective means (M) and standard deviation are presented below:

Table 25

Observations of Improvement in Attitudes and Behaviors of Child

<table>
<thead>
<tr>
<th>Attitudes and Behaviors</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>My child developed and improved interpersonal skills and relationship.</td>
<td>7.05</td>
<td>1.08</td>
</tr>
<tr>
<td>My child developed independence, self-direction, self-reliance and confidence.</td>
<td>6.63</td>
<td>1.30</td>
</tr>
<tr>
<td>My child seemed more interested in preparing for a career.</td>
<td>6.63</td>
<td>1.42</td>
</tr>
<tr>
<td>My child showed an improvement in her/his communication skills.</td>
<td>6.35</td>
<td>2.39</td>
</tr>
<tr>
<td>My child showed an improvement in her/his research skills.</td>
<td>5.89</td>
<td>1.70</td>
</tr>
<tr>
<td>My child became more dependable and responsible.</td>
<td>5.26</td>
<td>2.00</td>
</tr>
<tr>
<td>My child showed a better attitude toward learning.</td>
<td>5.00</td>
<td>2.19</td>
</tr>
<tr>
<td>My child showed more interest in school.</td>
<td>4.79</td>
<td>2.27</td>
</tr>
</tbody>
</table>
The 69.6% of the parents and caregivers seem to have observed an improvement in their child’s interpersonal skills through their participation in the WISE program. In addition, 65.2% of the respondents observed a greater independence, self-direction, self-reliance and confidence in their child. The 47.8% of parents and caregivers also observed a greater interest in their child regarding preparing for a career. Approximately one-third of the respondents noticed an improvement in their child’s communication skills. Observations regarding improvement in research skills, dependability, attitude toward learning and interest in school were indicated by just fewer than 20% of the respondents. The resulting percentages may not be significant since several parents and caregivers ranked all observations of improvement at the highest observation ranking (8).

Did your child show improvement during the past year in any areas not listed? If so, please describe those areas and the changes you observed in your child.

A total of 14 parents and caregivers responded to this question, and provided their own individual observations, as well as responding to the prepared list of observations in the preceding question. The observations are listed in below:

Table 26

Summary of Other Observations of Improvements in Attitudes and Behaviors

<table>
<thead>
<tr>
<th>Overall attitude was better.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem and self-confidence visibly improved.</td>
</tr>
<tr>
<td>Received practical experience working with other people.</td>
</tr>
<tr>
<td>Communicates with adults at a higher level.</td>
</tr>
<tr>
<td>Shown an improvement in maturity as internship progressed.</td>
</tr>
</tbody>
</table>
Could not do public speaking, he did very well in making his oral presentation.
Met people who gave him encouragement and support.
He became more focused and responsible.
He had to work very hard in his final presentation.
Acquired great self-direction in trying to get an internship in his field.

Would you recommend that other parents and caregivers encourage their child to participate in WISE?

Twenty-six parents and caregivers responded to this question with 78.3% that would definitely recommend and 21.7% would probably recommend WISE to other parents and caregivers for their child to participate. Parents and caregivers expressed an overall total recommendation to other parents and caregivers at 100%. The M for this question was at 2.78 recommendation level with a SD of .42. The parents and caregivers tend to definitely recommend WISE more than probably recommend. Twenty of the respondents explained their response to this question. A summary of the reasons appear below:

Table 27

Summary of Reasons that other Parents/Caregivers Encourage Participation in WISE

- It was a good, positive learning experience.
- It enhances their learning skills.
- Hands on training, let them see what they really want to do.
- The program is excellent and wonderful.
The positive effect on the child in terms of self-worth and sound basis for a future career choice was outstanding. Except for AP History, this was the only challenge he faced in school. Instead of students struggling to find something constructive to do in senior year, WISE enables them to do that. Going to site enables and prepares them not only for college but also for life. I think only positive things come out of it because it takes them out of the traditional classroom setting and into the business world.

Based on your experience with the WISE Program, were you: Satisfied (3), Satisfied, but have recommendations (2), or Not Satisfied (1) with the Program.

Twenty-six parents and caregivers responded to this question with 84.6% satisfied, 17.4% satisfied but have recommendations, and 0% not satisfied with the WISE Program. Parents and caregivers expressed an overall total satisfaction level with the WISE Program at 100%. The $M$ for this question was at 2.85 satisfaction level with a $SD$ of .39. The parents and caregivers appear to be more than satisfied with WISE but several were satisfied and offered recommendations to improve WISE. The recommendations were: (1) to make sure teachers really want to mentors in the program prior to the beginning of the Program; (2) to have continuous parent and mentor communication; and (3) to start the WISE Program.
Summary of Focus Group Discussions

In order to enhance the credibility of the findings of this research, the data will be triangulated through the use of focus group discussions with each stakeholder in the WISE Program (WISE Alumni, School-based mentors, Work-based mentors, and Parents/Caregivers). This section will report the findings obtained through these discussions by stakeholder groups. Fictitious names will be utilized in the reporting of these findings as a mechanism to facilitate the reading of this study by interested parties as well as ensuring the participant’s anonymity.

WISE Alumni Focus Group

The WISE Alumni met on June 21, 2000, at 1:00 P.M. in the Main Office Conference Room at Walter Panas High School. Four WISE Alumni participated in the focus group discussion with representation from the graduating classes of 1996 through 1999. The session lasted for approximately 45-minutes, and refreshments were served.

Why did you choose to participate in the WISE Program?

Joe: To get the work experience to help me figure out what I wanted to do instead of wasting time and money in pursuing a career I had no interest in.

Sue: Wanted to experience a career after my dad became ill and a physical therapist came to my house to help him get better. I thought that it would be interesting to try to help other people, and wanted to do my internship in it.

Lois: I had an interest in interior decorating, but after my experience in WISE I realized that I would not a like a career in this area. I couldn’t be placed in my first choice.

Lee: My dad had a heart attack, and I was interested in health careers. I thought the program would provide me with the experience to go into a career in health care. But I wasn’t sure whether I wanted to work in the hospital
What career choice or college major are you pursuing?

Lee: I wanted to be an EKG Technician, and with my training at BOCES and my WISE Internship, I was offered a job at the Hudson Valley Hospital Center after high school. I have been working there for two years.

Lois: I am pursuing a career in secondary education with an emphasis in science.

Sue: While doing my internship in physical therapy, I was able to view the work of an occupational therapist. I then became interested in that field, and I am now being trained in the field of occupational therapy.

Joe: I have decided to pursue a career as a theatrical lighting director after my internship, and I have been attending college pursuing this major.

Did the WISE Program help you in any way? If so, how? If not, why not?

All WISE Alumni answered in the affirmative. They all felt that the WISE Program was an invaluable experience.

One student indicated that the program made her more responsible, and put her on the right path for her future.

What was your WISE Internship? What did you do? Where did you do it?

Joe: I went to NYC and interned with a couple of lighting designers on Broadway and worked in CBS studios. I had a lot of hands-on experience. I helped prepare a new show coming into production, it was so exciting to see it finally open with my help.

Sue: I worked at a hospital with a physical therapist and with the athletic trainer. I helped out with a variety of sports injuries, taping, and exercise program.

Lee: I worked in the hospital with the EKG technician, and basically shadowed her every move. She showed me how to read and interpret the results of the EKG. Once I was able to point out a blockage on a particular patient.

Were the tasks you performed challenging?

Joe: Not much to do due to insurance purposes. There was a lot of electrical
equipment, which I couldn’t touch. Besides there was a strong union presence, they had people to do everything. I did a great deal of observing. It was tough getting the hands-on experience I wanted.

Sue: I had a lot of hands-on experience with the athletic trainer. I did a lot of taping of ankles, but I did not get much hands-on experience with physical therapy.

Lois: I processed mostly orders in the interior decorating business. I observed mostly the layout and design planning that the decorators worked on.

Lee: I helped them out with their paperwork. I also was able to view x-rays, and was taught how to interpret them. I had a lot of hands-on experience.

Reflecting back on your WISE experience, would you participate in the program again? Why or Why not?

Lee: I would still do it. I got a job out of it. But it taught me a lot of responsibility—like being on time—plus I really enjoyed doing it.

Lois: I would definitely do it again and pursue a different area. I found out that interior decorating isn’t for me.

Sue: I would do it again. It was the most worthwhile experience I had in high school.

Joe: I would definitely do it again, but try to keep my internship to the local area. It was difficult arranging the different sites in New York City. I had a hard time tracking down the work-based mentors, and the juggling of the transportation schedules in the city was a good experience but very frustrating.

Was your school-based mentor helpful to you? How did they help you? Why did you choose your school-based mentor?

Sue: I chose my mentor. She was one of my favorite teachers. I never actually had a bond with her, but she gave me confidence, made me feel smart, and gave me encouragement to do my best. She also gave me some good ideas.

Lois: I chose my mentor, because she always took an interest in me. She was so helpful. She made sure I met the deadlines for the various WISE projects.
She encouraged me every step of the way. She kept me focused, even when I didn’t want to do anything.

Lee: I chose my mentor, because I always had a good relationship with her. And I could always go to her when I had a problem. She was my Biology teacher in tenth grade, and my internship related to science. She was someone I could always go to. Always kept me on target. Reviewed and corrected my papers.

Joe: I didn’t have a choice. I was assigned to them. I was not a very good student and basically a goof off in high school. So I had to sign a contract in order to participate in the Program, and they kept a watchful eye on me. She really was a good mentor. She encouraged me, kept me focused, and I proved to them that I had matured, and was able to handle the responsibility.

What was your most memorable experience about the WISE Program?

Lee: Doing my presentation and worrying whether I would pass. It was a wonderful feeling sharing my presentation with others, and hearing the positive feedback from the evaluators. It showed that I had knowledge that I thought that I didn’t have. I had learned more than I thought I did.

Sue: The caring and helping of people during the physical therapist portion of my internship. I appreciated the physical abilities that I had, and how difficult some people had to just walk. During the athletic training portion of my internship, I was able to see the sporting events and become part of the team.

Joe: The most memorable experience was to actually see a live TV studio and set, and all the work behind the scenes. It was amazing to see how much time and work goes into the production of a program. Also, getting the opportunity to shake Greg Gumbel’s hand.

Would you recommend other students to participate in the WISE Program?

Joe: Definitely, if they had a good idea, what they wanted to do for their internship. They should do a lot of groundwork and give a great deal of thought to what they want to do. This should be done right away—lining up your site and school-based mentor.

Sue: If students have a general idea of what they wanted to be, I would definitely recommend it. But the program could have been a little more organized. It seemed to be organized at times. I just thought the program was pretty good.
Lois: I would definitely recommend it. But students must realize that there is a great deal of work. In fact, I did more work than my other classmates in the regular program in the second semester of my senior year. All the hours of work in the internship, the research paper, the journal writing, and the preparing for the presentation is a lot of work. But it was worth it. I would start the search for the work site as early as possible.

Lee: I recommend it. There was a lot of work, but it was worth it. Again, it should be started earlier in the senior year. Students should begin planning for their internship during the summer, and get started earlier.

School-Based Mentor Focus Group

The School-Based Mentor Focus Group met on June 21, 2000, at 2:00 P.M. in the Main Office Conference Room at Walter Panas High School. Three School-Based Mentors participated in the focus group discussion. The session lasted for approximately 45-minutes, and refreshments were served. The school-based mentors mentored a total of 13 students since the inception of the program.

How did your experience as a mentor differ from your experience as a classroom teacher? How was it similar?

Ms. X: It is the one-to-one relationship you have with students. It is very personal. You talk about issues in a very personal way rather than in the classroom where things are more impersonal.

Ms. Y: The students I mentored were pursuing an internship in my subject matter area. It helped them narrow down what they did not want to do. It was a mutually positive experience. You spoke to students in a different way. You listened to their frustrations and tried to help them solve problems. They made the leap from student to a working person. It was a tough transition for them, and I tried to advise them how to do deal with a host of issues that they were dealing with.

Mr. Z: As a mentor, you develop a relationship that is more in depth than as a regular classroom teacher. You're delving into a specific area, and your dealing with specific issues dealing with that particular career path.

Ms. Y: In some ways, it is almost an equal relationship rather than the
traditional classroom relationship. Since you talk to each other as workers, it becomes a deeper relationship and closeness develops. You are also dealing with the unpredictable, unlike planning for a lesson when you know what to expect. But with mentoring the relationship, you don't know what to plan for. The meeting is dependent upon what the student experiences that particular week, and how you can listen effectively and guide them.

Do you think the WISE Program provides a more meaningful, engaging and useful experience for seniors than the conventional classroom experience?

Ms. X: I think it does for some students. What I think is wonderful is choice. For some seniors, they know what they want to do. But for some who are not really sure, the program is a wonderful option for them to explore their interests. It has been incredible to see the amount of growth and maturity in the students I have mentored. I am very happy they have that option.

Mr. Y: I agree. To provide them with that alternative assessment, and complete that last leg of the senior year is so very important. But it is not suited for all students. Some students need a more conventional approach to their studies, while other students can handle the responsibility of going out of school. To pick one student I mentored, he would come back from his WISE experience grinning ear-to-ear sharing what he learned and what he was doing with other students. It is not for everyone, but providing that option makes the program very valuable.

Ms. Z: I disagree in part with my two colleagues. All students need to know where they are going. Even if they have an idea of what they want to do, the program confirms their choice. I feel all students should participate in the program. In fact, it should be required.

In what ways did your students benefit from their experience in WISE? What skills did they develop?

Ms. X: They learned things that they I could not teach them. In fact, they learned things that they could not have learned about the subject matter in college. They came back so excited, and taught me things that I wasn't aware of about my subject matter. What was equally phenomenal was the development of their interpersonal relationship skills. They were able to interact with adults in a chosen area on a professional basis. That was something that could not be equalled to or
experienced in the classroom. It was especially beneficial for some special education students. It gave them a sense of accomplishment and built their self-esteem. The one-on-one with the adult in the workplace helped shape their experience that the classroom could not replicate.

Ms. Y: I can think of one of my students, who accomplished so much through this program. Even though we had a good relationship, he could not deal with other adults. He started off on the wrong foot with his work-based mentor. So we worked on a program of conflict resolution. It completely changed the way he saw that adult, and it completely changed the way the adult viewed him. He saw the benefits doing something like this in an adult way. And after graduation, he visits his work-based mentor and helps him out. He learned about conflict resolution and dealing with anger in an appropriate way.

Mr. Z: They also learn to build a rapport and a feeling of a comfort level with their work-based mentor that they look forward to going to the work site. And that they will remember forever. Let’s not forget the development of the interpersonal relationships with us, it was beneficial for us too.

What was your most positive experience as a mentor?

Ms. X: What was especially positive was to see the transformation of one of my students who was angry with me in ninth grade and chose me as his mentor. Another student I mentored made a decision on a career in acting, and she is on television. I am so gratified that I had something to do with that success.

Mr. Y: I relish the fact when students come back to visit you and express their thanks that you were their mentor. It is so rewarding, and their appreciation is so sincere. You can’t match that or give any better gift than their sincerity.

Ms. Z: The pride you feel on the day of their presentation. You could see how much they have matured and grown. You also feel very sad. It is like one of my children leaving home for college.

What was your most frustrating or difficult experience as a mentor?

Mr. X: Time. The time constraints. It is difficult teaching five classes, and trying to give time to mentor these students.
Ms. Y: Besides the time constraints, the frustrations of not finding an appropriate site for students to pursue their area of interest. Some areas are difficult to place students, due to the confidentiality of certain professions, for example, physical therapy.

Ms. Z: I agree about the time constraints, also the finding of appropriate sites. But also the difficulty to guide students in the completion of the research paper, and the motivation levels of some students causes an area of frustration. Even though it eventually works out for the best, some students waste the totality of the experience. That became very frustrating to me as a mentor.

What were some of the activities you did to help your students in the WISE Program?

Mr. X: Help them out with their presentation. They became more comfortable in doing their final presentation.

Ms. Y: Besides helping them with their presentation, I proofread their journals and research papers. If there was a problem at the site, you tried settling issues that developed there.

Ms. Z: Those were the activities that I did also. We could add advising and being a good listener.

What recommendations or suggestions do you have to improve the WISE Program?

Ms. X: Several students were not up to level, and had a tough time researching and obtaining information. Although they had no difficulty with the work site, I know that was more important. But I became more of an English teacher than I needed to be with some of these students. They still benefited, but it was frustrating to them.

Ms. Y: I really have no suggestions.

Mr. Z: Find a way to build in some more time for mentors to meet with students.

Overall, how would rate your experience with the WISE Program on a scale of 1 to 5 (with 5 being the highest and one being the lowest)? Ms. X: 5; Ms. Y: 5; Mr. Z: 5
Work-Based Mentor Focus Group

The Work-Based Mentor Focus Group met on June 23, 2000, at 12:00 P.M. in the Seven Stars Diner in Shrub Oak, New York. Four Work-Based Mentors participated in the focus group discussion. The session lasted for approximately one hour and the researcher purchased lunch. The worked-based mentors mentored a total of eight students since the inception of the program.

What value do you see in the WISE Program for seniors?

Mr. G: For those students who have an idea about what they want to study in college, WISE is excellent. I wish I had this opportunity in 1970. This is how strongly I recommend the program.

Ms. D: What an incredible experience for a senior. They get to see first hand all the aspects of the career they may wish to pursue, then they can make an educated decision about a career.

Mr. B: It is a great opportunity for students to get an idea what working in their chosen field would be like. Even if the experience is not what they hoped for, they can then rethink their option as they head for college.

Ms. R: This program can be very valuable, if the students are correctly matched up to the area they wish to pursue.

How did the student benefit from their experience at your work-site?

Ms. R: Although I may not have had the most positive experience with my student, I feel he developed a better understanding of my field of work.

Mr. G: Besides developing that understanding about my business, they kind of realize the demands of the workplace. I noticed how they became more responsible and self-disciplined through the experience. It’s all what you put in to it for both students and mentors.

Ms. R: Yes, I would agree with everything that has been said, but I think my students benefited by becoming more responsible for the work at my site. They grew and became really mature.

Mr. B: What can I add? Learning about the job, becoming more work savvy, and becoming more responsible are key benefits. But, I kind of like the
development of the rapport with my students. They learned how to deal with adults, and I learned how to deal with them.

**What was your most positive experience as a mentor?**

Ms. R: It was such an exciting opportunity to try and educate young people about specific fields provided the interest is present in the student.

Mr. G: The opportunity to work with a motivated student who is interested in pursuing my career was so gratifying. It actually helped me refocus on my career and gain a greater appreciation for what I do. You know that doing the same job everyday can burn you out. But to have a young and enthusiastic student work with you, and teaching them what you love about what you do is an exhilarating experience.

Ms. D: What a great experience to see a student grow and mature before your very eyes. It makes me want to become a teacher.

**What was your frustrating or difficult experience as a mentor?**

Mr. B: It would have been better if the student’s time could have been a little more flexible. He did his best to accommodate our schedules and we tried to accommodate his.

Ms. R: I was especially frustrated about the transition between the student and being a part of a business environment.

Ms. D: I didn’t experience any frustration with the being a mentor. It was a great experience.

Mr. G: Same with me. No frustrating experience.

**How would you rate your student intern on a scale of 1 to 5 (with 5 being the highest and 1 being the lowest)?**

Mr. B: Without a doubt a 5, both of the students I mentored were terrific.

Ms. R: I had a difficult time with my student. He was not very motivated. I would rate him a 2.

Ms. D: I would rate one student a 3 and my last one a 5. She was more enthusiastic and showed greater initiative in wanting to learn about my profession than the previous student.
Mr. G: I would rate both of my students a 5. They were so enthusiastic and appreciative working with me.

Would you recommend your colleagues to participate in the WISE Program?

Mr. B: Definitely. It is a way to help kids pursue their dreams.

Ms. R: Even though I did not have a good experience, I may participate again. I am not really sure, it will depend on the student. I hate to write the program off, it was my first experience with it.

Ms. D: Would recommend participation without hesitation. Great program!

Mr. G: Ditto for me!

Overall, how would rate your experience with the WISE Program on a scale of 1 to 5 (with 5 being the highest and 1 being the lowest)?

Mr. B: Looking at the whole program, I give it a 4. There needs to be some issues to address, but some minor tweaking will definitely rate it a 5.

Ms. R: In its totality, I will give it a 3.

Ms. D: A 5 without a doubt.

Mr. G: I hate not being original. I'll give it a 4 ½.

What recommendations or suggestions could you offer to improve the WISE Program?

Mr. B: I just say to keep doing this program. It is a real plus for the school and the community. I can't offer too many suggestions, maybe more communication with the school.

Ms. R: I hate to put a damper on this whole conversation. I guess I did not have the normal experience with the program. I feel that students should be screened more carefully prior to participation. They should be better prepared and supervised. Perhaps more research should be done in matching sites. I hope this helps.

Ms. D: We need more of this program. I would have it start sooner. Like in the last semester of the junior year.
Mr. G: Probably the only suggestion I have is that there should be more visits by the high school mentors to monitor student progress, and get a greater appreciation of what the kids are doing. Otherwise, I have been ever so pleased.

Parent/Caregiver Focus Group

The Parent/Caregiver Focus Group met on September 13, 2000, at 5:00 P.M. in the Seven Stars Diner in Shrub Oak, New York. Four parents participated in the focus group discussion. The session lasted for approximately one hour and the researcher purchased dinner.

Did you notice any changes in your child's attitude towards school? What specific changes did you observe?

Ms. P: I notice a great deal of change in my son. I thought my son was at point of being turned off at school. He wasn't very happy at school. He wasn't having a good time. When he was introduced to the WISE Program and because of his previous year of not being organized or responsible, he was considered not a good candidate for the Program. I then made an appointment with the principal and advocated for him to become part of the program. A contract was set up with him that provided specific rules and guidelines for him to follow in order to stay in the program. It just taught him responsibility, to be assertive, and it showed him that he was good at what he was doing. The Program just gave him so much confidence and self-esteem. It was 100% turn around for him. He was on the honor roll all year long. It was the best thing that ever happened to him. We did not have one bad experience with the Program. I want my second son to do it.

Ms. G: I noticed that my son became so excited about school, because he was focused on a career. He enjoyed what he was doing. He excelled in English and Social Studies in the first semester, because he knew that if he didn't, he would not be permitted to do his internship. He didn't like the idea of the journal. His mentor encouraged him to do it. Now that he is in college, he realizes that many of things he learned in WISE have helped. The researching of the material and the presentation gave him a head start in college. Most of those
experiences, he would not have gotten if it weren’t for the WISE Program.

Ms. M: My son continued his interest and love in TV Production since middle school, by choosing it as an internship in the WISE Program. He was not an outstanding student, he did what he wanted to do when he wanted to do it. He did well and better than usual because of the WISE Program. He had no false idea that it was less work. He was so interested in his field that he couldn’t wait to begin his internship. He is now majoring in it in college. The skills that he learned in WISE are understated. He really knows his stuff. He made up his mind in what he wanted to do, and he is sticking to it. A lot of those things he learned on his internship in WISE are currently helping him in college.

Ms. R: I had two daughters in WISE. Second semester in the senior year, my daughter had a major attack of “senioritis”. Didn’t pay much attention, but always was enthusiastic and looked forward to go to her WISE internship.

What did your child discuss with you about their experience in WISE?

Ms. M: He needed to be encouraged to keep on task and schedule his time. He is the eternal procrastinator. He complained about doing his journal, better at the spoken word than written word. Even to this day, he would rather speak before a group than write. We really had to sit on him to complete all the written work for WISE, but when it came to the presentation he was just raving how wonderful the program was and how it changed his life.

Ms. G: My son would come home, and talk about the ambulance calls he was on and the paramedics. I remembered him coming home one day kind of being upset. This was supposed to be an internship with paramedics. He would just drive the fly car, which was exciting, but he wanted to be on the calls since he is a certified EMT. He needed to go to his mentor and speak calmly as an adult to his mentor, and he was able to negotiate with his mentor to split the time between the driving and the calls. His mentor was so impressed by his maturity that he told me that it was like talking to an adult. All these life skills he learned that revolved around the WISE program.

Ms. R: Both daughters complained about the journals incessantly. One daughter enjoyed her relationship with the work site. They treated her as an adult. It was the first time she was treated as an adult among adults. She worked in retailing and as a lifeguard, but she was treated
as a kid. In the internship, she was treated and respected as an adult, and she just loved it.

Ms. P: My son helped the coordinators work on the WISE brochure and emblem for the graduation sash. He felt that he was part of the group and learned the business and publicity end of the program and felt part of the team.

All parents commented on how their children learned about time management, organization, and becoming more responsible. They felt that these skills learned in the WISE Program are more important than the career exploration aspect.

Do you feel that the WISE Program was a worthwhile experience for your child?

Why or Why not?

Through their comments from the previous questions, the parents all answered responded with a Yes!

Ms. M: The bottom line is that whole reason why we started it. What to do with the vast wasteland of the second semester of the second year, when students are usually through at 11:00 a.m.? That alone was a major benchmark of any experience they have in WISE.

Ms. R: A bad experience in WISE is a good experience rather than the alternative of succumbing to senioritis.

Would you recommend that other parents encourage their child/children to participate in the WISE Program?

All parents laughed at this question and responded, all the time. In fact, the parent, whose school district tuitions its high school students to Walter Panas High School, plans on advocating for a WISE program when their new high school opens.

What did you like best about the WISE Program?

Ms. R: The real world experience.

Ms. G: I probably saved $50,000, because after my son finished his internship
he knew that was what he wanted to do. Especially, since he wasn’t a focused student, he knew exactly what he wanted to do. I was so pleased that he was able to express himself and aggressively pursue his options at college. I believe that the WISE Program helped him become more confident and focused, and he gained those all-important life skills.

Ms. P: For my son, it gave him a chance that he could do well, and be successful in what he wanted to do. It made him feel that he was good enough to do this.

Ms. M: It covers all levels of students, not just the top students. A student can do any type of internship. You can tailor make this program based on the student’s interest.

What did you like least about the WISE Program?

All the parents chuckled and responded, the journal.

Ms. R: The journal was just a pain for the kids. They hated it, and we hated to hear about it.

Ms. G: Didn’t they need it to write their presentation?

Ms. M: Maybe it wasn’t necessary to write in it six times a week. I just have a problem with journals in general. But journals are here to stay.

Ms. P: In the beginning they did it a lot, but at the end they weren’t as strict. They also had a hard time in locating internship sites. It was difficult to get there for some kids.

Ms. M: Some students change sites three or four times until they found the right one.

Overall, how would you rate your experience with the WISE Program on scale of 1 to 5 (with one being the lowest and five being the highest)?

Ms. G: 6
Ms. M: 5
Ms. P: 5
Ms. R: 4 ½
What suggestions do you have to improve the WISE Program?

Ms. G: More publicity for the Program. Area businesses need to know more about it. Some people think it's for students with low ability and not for every student. Need to get that message out.

Ms. P: There needs to be better coordination between the sites and the school.

Ms. R: There should be a manual for coordinators to provide consistency in the program.

Ms. M: Need to publicize it internally before the senior year. Should start talking to ninth graders. Students should start thinking about it earlier, so the internship decision is not made at the last minute. We should also stress that the internship could be in an area of interest not necessarily a career choice.

Ms. G: Sophomores and Juniors should be invited into the presentations or have the WISE students practice their presentations in younger students English classes. It gives it the stature it deserves.

Ms. M: Bring former students back and talk to the kids about the program.

In conclusion, the focus group discussions with the various stakeholders in the WISE program clearly supported and triangulated the data collected from the survey questionnaires and telephone interviews. The WISE Program seemed to have a powerful impact on all of the stakeholders.

Analysis of Student Journal Entries

One of the requirements of the WISE Program is that students must keep a daily journal recording their reflections about their internships. The journal entries provide a vehicle for student self-discovery and introspection. Students are able to vent and articulate their frustrations and disappointments, as well as their successes and triumphs.
It also provides students with a form of self-discipline to chronicle the events and their feelings about their internships.

The journals are monitored and reviewed by their school-based mentors for accuracy and completeness. At the conclusion of the internship and prior to the student’s final presentation to the panel of evaluators, students select certain entries that they wish to share with the panel.

A review of several of journals revealed a depth of student feelings and self-discovery as they navigated the journey through their internship. Students were experiencing events that made changes in how they viewed themselves, what they learned, and what direction they wished to follow. At this point, this researcher realized that the goals of the WISE Program were actually being achieved through the very innermost feelings and thoughts of these students’ journal entries.

The purpose of implementing the WISE Program was to provide students with an experience to help them make better and more informed decisions regarding their future. The program also provided the opportunity for students to apply their academic skills in a real world setting and improve their interpersonal skills, while enabling them to develop a sense of independence and self-confidence. After reviewing several journals, I chose the following journal entries from three students that will illustrate the profound impact WISE has had on their lives.

Student A’s internship took place in the Middle School as a physical education teacher. Although Student A experienced some frustrations and difficulties in his internship, he gained a greater appreciation of the teaching profession, learned a variety of strategies, and discovered the teacher that he wanted to be. During his internship he was able to observe and
work with two different physical education teachers who had two different types of teaching styles and approaches in dealing with students. Student A reflected:

Mr. M believes in getting involved in the games and yelling at the students to discipline them. Mr. T is very calm and reacts to situations in a mellow manner. I feel that students are a little intimidated by Mr. M because he yells so much. Also I feel that if a student has a problem they would go to Mr. T instead of Mr. M, because he is so calm and kids know it is easier to talk to him. I decided to become a teacher, I think that I would combine the two styles of teaching. I would only get loud and scream if I had to, and I would be very calm around students most of the time. I would also want students to feel comfortable around me and feel like they can talk to me about anything.

During his internship Student A reflected on a day that he helped a student accomplish something that he thought he could never do. One of the activities the class was doing was a rope climbing exercise. There were six special education students in the class who observed the other students climbing the rope, but felt that they couldn’t do it themselves. Student A was determined to have these special education students achieve. He states in this journal entry:

I said to myself, why can’t they do it. I went up to one of the kids and told him to try it and give it a shot. He seemed scared when I told him and at first he didn’t want to do it. It took awhile, but I finally convinced him to try it. He went over got roped up and came over to the net. He wanted to quit after that but I told him to try it again. I talked to Chuck and guided him all the way to the top of the net. When he sat on the beam at the top, the whole class cheered and clapped for him.
This was probably one of the best moments of his life, and it had a similar effect on myself. For the first time, I successfully taught a kid how to do something and he did it. It was a great feeling!

Student B’s internship took place at a newspaper office working with the sports reporter. Student B wrote articles and received a byline and took sports photographs for the newspaper. He was able to apply his academic skills at his site and applying the skills he developed from his photography elective. Student B had an almost perfect experience. He felt the pressure of publishing deadlines and received a great deal of praise and encouragement from his work-based mentor.

Student B reflected:

While at the game I was able to dabble in the world of photography. And I must say I love it. I think that I have the potential to be good at it because I did a lot of sports action photos in photography class as a sophomore but I guess I will have to wait and see. In order to improve, I just need to practice because the saying “practice makes perfect” is definitely true. My timing is a little off but I am not too worried about that.....But anyway, my first article got rave reviews from my peers, family, teachers, and community members. Now I was afraid that this one would not be as good, which would make me look bad. However, I refused to let that happen as I worked very hard on it, as I will do for all of them. I was up until midnight working on it making sure it was the best quality it could be.
Student B seemed to be a natural at what he was doing for his internship. The newspaper articles he wrote appeared weekly, and he received strong support from his work-based mentor. Student B reflected on a time he had to meet his deadline, and was concerned about the quality of his article. He stated:

Everybody was rushing to meet the deadlines, because in journalism the worst thing you can ever do is miss a deadline.... As I went in with my article to the editor, I figured that I would have to go and run little errands around the building. Boy was I wrong. He was so pleased with my article he said, “this is great, truly great” that he assigned me to write another right there on the spot....The editor commented that I have a special talent, he recommended that I pursue sports journalism as a future career. Being honest, this made me blush as a huge grin came across my face. Never had I received a compliment of that nature from someone of his stature. I am going to have to make a decision on what to do regarding college, but I will hold on that for now.

Student B was especially expressive about how he loved his internship. He loved what he was doing and looked forward to going everyday, he stated:

I must say that every single day I look forward to 11:30 when I am able to leave school to go to my internship. It has truly exceeded my expectations it is so much fun and very beneficial to me as a person as well. It has helped me grow so much; joining the WISE program was a great decision. I just hope my fellow classmates enjoy their internships as much as I do.
Student B became even more reflective about the entire WISE program. His thoughts and feelings epitomized what the Program hopes to achieve for all students in WISE. Student B closed his journal with the following reflection:

As the year comes to a close as does my high school career, I would like to say that the WISE program truly had a large impact on my life. It taught me so much about the world of sports journalism and at the same time I learned a lot about myself. I learned that I have the ability to do anything I want as long as I set my mind to it and work hard right from the start. My feelings expressed in the entries do not even scratch the surface concerning the WISE Program as a whole. It is definitely a great thing and I hope many other future students see the light and join, for it will help them get a head start on the rest of their lives.

Student C's internship took place at an elementary school working in a fourth grade class. The experience helped him determine that he loved children and that education would be the best choice for his career. He experienced the joy of children success through his dedicated efforts to help them achieve. Student C became very reflective and philosophical about the meaning of life as his internship progressed. This particular excerpt shows the maturation of a young man after a few short weeks in the WISE Program. He indicated that:

It was weird to think that I am going to be teaching these kids information that I attained just a few short years ago myself. It just got me thinking that life is so short, too short. You have to take advantage of what you are given and strive to get the rest. People don't realize how short life really is. You spend the first 20 years of your life wanting to be 21 then the rest trying to get back. People
should just realize that every age is important that you should not try to be someone else, just be you.

Student C expressed a sense of self-discovery as his internship progressed. He reflected:

I found out that I really love to work with children....This internship site is so good in so many ways. I am learning a sense of responsibility, time management and many more essential skills of life. What I am learning goes beyond books though I am learning about myself. I am learning about life. I am learning life's lessons while still in high school. Not many people get the chance to explore a possible career choice to decide whether or not I am going to follow that path. I made my mind up thanks to this internship to become a teacher. The small impact I made on the students in my classroom is unbelievable. They look forward to me coming, and I feel like I am letting them down when I'm not there. This was probably the best feeling that I had so far in the internship.

Student C discussed how by helping children, he realizes something about himself that he never realized before. He explains how he worked individually with one child who had difficulty in grasping a particular concept in math. The selection shows his determination to help students learn and achieve:

.....I feel so bad because he tries so hard but with little gain. He gets embarrassed when other students get done before him and raise their hands. He is so fragile,
I am learning so much about individuals through this internship. I am learning that no two kids are the same. I never knew that I had such a sensitive side until, I helped him one day in class. I am not only learning about the education profession anymore. I think that more importantly I am learning about myself. There is a lot more to me than even I knew, that is scary....He is such a good kid that I am not going to stop until he understands mathematics from top to bottom.
Chapter V

Conclusions and Recommendations

The purpose of this dissertation was to determine what influence the Walter Panas High School Individualized Senior Experience (WISE) program has had on the selection of career choices and/or college majors of its student participants in comparison to non-participating students in the graduating classes from 1996 through 1999. The findings of this study will provide an in-depth program evaluation that will lead to program improvement and replication in other schools.

The intent of the WISE program implementation was to provide students with a career awareness and exploration experience prior to their graduation from high school. The data and experiences students gathered from their participation in the program were to help students make more informed decisions regarding their future career plans and/or college majors. In addition, the program was to provide students with the opportunity to apply academic skills outside the traditional classroom setting, as well as to inculcate a sense of independence and self-confidence. In addition, students were to develop and improve their interpersonal skills and to establish new positive and productive relationships with adults, while gaining an appreciation of the business community as an extension of their education.

Because the program incorporates the basic tenets of the School-to-Work reform effort student experiences in school-based learning, work-based learning, and connecting
activities, the WISE Program could make education more relevant in a contextualized setting. The program also connected its achievement goals to the standards established by the New York State Education Department regarding Career Development and Occupational Studies, which emphasize career awareness and development, integrated learning, and career majors.

The data compiled for this study was based on questionnaires, telephone interviews, focus group discussions and a sampling of student journal entries. All stakeholder groups in the WISE Program (student participants, school-based mentors, work-based mentors, parents/caregivers) were represented in the data collection. The data was analyzed using the mean, which is the most frequently used indicator of central tendency.

Research Questions

The research questions addressed in this study were:

1. What impact did the WISE program have on students regarding their decision making about their future career plans and/or college majors?

2. What impact did programs at Walter Panas High School have on non-participating alumni (students) regarding their decision-making about their future career choices and/or college majors?

3. What were the most frequent goals achieved in the WISE program from the perspective of its program participants (students, school-based mentors, work-based mentors)?
4. What skills and benefits did students derive by their participation in the WISE Program?

5. What were the satisfaction levels achieved by the WISE program from the perspective of its program participants (students, school-based mentors, work-based mentors)?

6. What recommendations can be made to the WISE Program in order to improve the effectiveness of the program for its student participants?

1. **What impact did the WISE Program have on students regarding their decision making about their future career plans and/or college majors?**

   The findings of this study indicate that the WISE Program has had an impact on the decision-making process of students regarding their future career plans and/or college majors. The data collected reveals that 52 out of the 61 WISE Alumni (85.2%) surveyed indicated that their primary purpose for participation in the program had been to help determine whether they wanted a career in their particular area of interest. At the conclusion of their participation in the program, 48 out of the 61 WISE Alumni (78.7%) surveyed indicated that their experience in the WISE Program had helped them decide on a career and/or college major. In addition, 53 WISE alumni (86.9%) indicated that through their participation in the program they were able to learn about their own individual strengths and weaknesses, while 54 WISE alumni (88.5%) felt they learned and developed new skills through their WISE experience. Even though participants felt they developed new skills, this was a self-reported perception by participants, which did not identify the skills developed. (See Appendix A, Chart A, page 187)
Approximately 64% of the WISE Alumni surveyed indicated that they were presently pursuing a career or college major based on their experience in the program, while approximately 78% of the WISE Alumni responded that the program influenced their decision to pursue or not to pursue a career or college major.

All 61 WISE Alumni stated that the WISE Program had helped them in some way, including decisions to drop the pursuit of their WISE project career area or decisions to modify or confirm their WISE project career area for the future. In addition, several WISE Alumni were able to clarify their choices within a particular career cluster. For example, a WISE Alumni had selected a career in elementary education. After her internship in the WISE Program, the student was able to determine that she preferred to teach students at the upper elementary level rather than the primary level.

Through the interaction in the focus groups, all WISE Alumni indicated that they had chosen to participate in the WISE Program to experience a career area of interest. One student claimed he expected WISE “... to help me figure out what I wanted to do instead of wasting time and money in pursuing a career I had no interest in.” Five out of the six students in the focus group had their career choices confirmed through their participation in the WISE Program. One student chose not to pursue the career experienced in her internship, but indicated that it was valuable since it helped her make a decision of what not to pursue.

The analysis of excerpts from student journal entries confirmed the extensive impact the WISE Program had on career choices. One student not only determined his career choice, but also identified the type of teacher he would like to be by observing the interactions with students of his two work-based mentors. He concluded that, “I would
want students to feel comfortable around me and feel that they can talk to me about anything." He also shared in his journal the decisive moment that confirmed his career choice: helping a student succeed at a seemingly impossible task, "... was probably the best moment of his life, and it had a similar affect on myself. For the first time, I successfully taught a kid how to do something and he did it—it was a great feeling!"

One student pursued sports journalism for his internship. Although he was excellent at what he was doing and was encouraged to pursue this career by his work-based mentor, he still was not sure. He lamented, "There are so many options to choose from and even more factors that will play a role in my decision. Like, is the money really what matters? Or should I look for a job that I really like regardless of the pay or lack thereof?" The WISE Program enabled this particular student to reflect more deeply about his future, and just what was important to him. Through his participation in the program, his final decision sometime in his life will be based on the collective experiences he had in the program. The decision he will ultimately make will be based on information and experiences that were gathered during his internship experience.

2. What impact did activities and programs at Walter Panas High School have on non-participating alumni regarding their decision future career choices and/or college majors?

The non-participating alumni were the students who did not choose to participate in the WISE Program while in high school. These students followed the conventional path of completing their high school education. Even though they did not take advantage of the opportunity to participate in the WISE Program, they were exposed to several programs provided by the school for career awareness and career exploration.
The non-participating alumni were presented with a list of career awareness and career exploration activities that they experienced during their high school career. As they surveyed this list, they were to respond with a Yes or No answer to a number of activities and programs they experienced. Approximately 90% of the 29 students surveyed reported about their attendance at the career fair. Approximately 52% reported using the Career Center located in the Guidance Office, while 48% indicated using technology in exploring possible future careers. Of particular concern was the low activity experienced by students regarding career-counseling services directly provided by their guidance counselors. Approximately 24% of the students surveyed indicated they experienced this activity. (See Appendix A, Chart B, page 187)

Although these students did not participate in the WISE Program, the other activities and programs they participated in did provide some impact regarding their selection of a career or college major. Even though the respondents had limited career awareness and exploration activity experience in high school, approximately one-third had made a choice regarding their future career or college major based on their experience in high school. Overall, approximately 55% of these students were very definitive about their career choice and/or college major, whether based on their high school experience and/or other factors.

3. What were the most frequent goals achieved in the WISE Program from the perspective of its program participants?

The WISE Program delineated five broad student achievement goals to be achieved: to provide students with (1) an opportunity for career exploration and development (learning the specifics of a particular career choice); (2 an opportunity to
apply their skills and knowledge outside the classroom in an area of special interest; (3) an opportunity to develop independence, self-direction, self-reliance, and confidence; (4) an opportunity to develop and improve interpersonal skills and relationships; and (5) an opportunity to learn about and use community resources as an extension of traditional education.

Both the WISE Alumni and the work-based mentors indicated that the goal most frequently achieved by the program was the opportunity for career exploration and development. On the other hand, school-based mentors reported that the goal most frequently achieved from their perspective was the opportunity for students to develop independence, self-direction, self-reliance, and confidence.

Although the WISE Alumni and work-based mentors were in agreement regarding the most frequently achieved goal, there was a discrepancy regarding the frequency with which the remaining goals were achieved. The WISE Alumni ranked application skills and knowledge outside the classroom as the second most frequently achieved goal. The third and fourth goals most frequently achieved from the perspective of the WISE Alumni were in the affective domain—indirectness, self-direction, self-reliance, and confidence followed by improvement in interpersonal skills and relationships respectively.

The school-based mentors ranked the career exploration and development goal as the second most frequently achieved goal. The third and fourth goals most frequently achieved according to the school-based mentors were the opportunity to develop and improve interpersonal skills and relationships, and the opportunity to apply skills and knowledge outside the classroom.
The second rank goal surveyed from the perspective of the work-based mentors was providing students with the opportunity to develop independence, self-direction, self-reliance and confidence. The third and fourth goal most frequently achieved according to the work-based mentors was the opportunity for students to apply their skills and knowledge outside the classroom, and the opportunity to develop and improve interpersonal skills and relationships. This goal was also an area of agreement with the WISE Alumni.

In conclusion, the goal that provided students with the opportunity to learn about and use community resources were ranked fifth as the most frequent goal achieved by all participants in the WISE Program. The pattern of agreement with the frequency of program goal attainment from the perspectives of the WISE Alumni and work-based mentors was due to the mentoring process of focusing on career exploration and development at the work-based learning site. The school-based mentor served as a support function at the school by offering encouragement, by reviewing journals, and by giving recommendations for the final presentation. From this perspective, the school-based mentor determined that the students were becoming more independent, self-directed, self-reliant, and self-confident. The school-based mentors actually viewed the students transitioning to adulthood, rather than viewing the prescriptive steps in career exploration that were conducted at the work-based learning site. The combination of these two goals as the most frequent goals attained through these varying perspectives makes a powerful statement about the value of the program in providing students with a total maturation and transitioning process beyond high school. (See Appendix A, Chart C, page 188)
As previously mentioned, the WISE Alumni focus group discussion confirmed that the goal of career exploration and development was achieved. Five out of the six students in the focus group had their career choices confirmed through their participation in the WISE Program. One student chose not to pursue the career experienced during the internship, but indicated that the WISE Program was valuable since it helped her make a decision of what not to pursue. The analysis of excerpts from student journal entries also confirms that the career exploration and development was the most frequent goal achieved from the perspective of the WISE Alumni.

Because the frequency ranking was difficult to determine through survey questionnaire data collection methodology, the researcher could not just rely on it to respond to this research question. Instead the observations and transcription of notes from the WISE Alumni focus group discussion, as well as the analysis of student journal entries, this researcher concludes that all the goals of the program appeared to have been achieved. It was evident that students consistently applied their skills and knowledge at the work-based setting. Students developed independence, became more self-directed, responsible, and confident. Through their interactions with their school-based mentors and work-based mentors, students developed interpersonal skills that fostered positive relationships with adults in the community. Finally, the communities that provided those essential internship sites became a valuable resource for experiences that could not have been duplicated in the traditional school program.

The school-based mentor focus group discussion confirmed that the most frequently achieved goal was the ability to develop independence, self-direction, self-reliance, and confidence as the goal most frequently achieved. The consistent theme in
the discussion was the pride in seeing the growth and maturity in the students as the internship progressed. One school-based mentor commented, "...What was equally phenomenal was the development of their interpersonal relationship skills. They were able to interact with adults in a chosen area on a professional basis."

The work-based mentor focus group discussion confirmed the career exploration and development goal as the most frequent goal met by the WISE Program. Work-based mentors had strong praise for the opportunity the Program provided students to experience a career area prior to their graduation from high school. They wished that they had been given the same opportunity in high school. One work-based mentor captured the spirit of the program by commenting, "It is a great opportunity for students to get an idea of what working in their chosen field would be like. Even if the experience is not what they hoped for, they can then rethink their options as they head for college."

Through further discussion, other goals of the program became quite evident to the work-based mentors. Mentioned frequently in the discussion was maturation and growth of students and the development of interpersonal skills.

4. What skills and benefits did students derive by their participation in the WISE Program?

The findings of this study indicate that the students who participated in the WISE Program derived a number of skills and benefits. The skills and benefits observed by school-based mentors and work-based mentors, as well as the changes of attitudes and behaviors observed by their parents and caregivers coincided and demonstrated the accomplishments of the goals of the program.
School-based mentors were given a list of seven benefits a student would have experienced through their participation in the WISE Program. They were to rank the benefits from seven to one with seven being the highest benefit experienced. The exploration of a particular career possibility was given 5.63 (M) as the highest ranked benefit experience. However, according to 63.3% of the school-based mentors indicated that gaining self-confidence and students taking responsibility for their own learning were the highest benefit experiences. The benefits of learning about a particular topic, the world of work and problem-solving and decision-making skills were mentioned approximately by 41.2% of the respondents. The benefit of learning the role of technology was indicated by 14.3% of the respondents.

The school-based mentors were given a list of six skills and asked to rank these skills from six to one with six being the highest skill developed. The highest ranked skill developed by the students was working with adults and peers with a 5.02 (M). However, 73.8% of the school-based mentor respondents indicated not only working with adults and peers, but also setting and adjusting goals, time management and presentation skills were mentioned as the highest skills developed in the range of 52.4% through 54.8% of the respondents. Research and technology skills were indicated by 30% of the respondents.

Work-based mentors were given a list of seven benefit experiences a student would have in their participation in the WISE Program. They were to rank the benefit experiences from seven to one with seven being the highest benefit experienced. Developing a better understanding of a particular career possibility was given 6.2 (M) as the highest ranked benefit experience. However, according to 40% of the work-based
mentor respondents, developing a better sense of the world of work was the highest benefit experienced. The benefits of improvement in self-confidence and learning about specific strengths and areas in need of growth were indicated by 33.3% of the respondents as the highest benefit experienced. The benefits of acquiring specific career knowledge, a value of reliability and dependability, and exhibiting great self-discipline were mentioned by 23.7% of the respondents.

Parents and caregivers were asked if they noticed any changes or improvement in their children's attitudes and behaviors through their participation in the WISE Program. They were given a list of eight attitudes and behaviors that were related to the benefits and skills derived from the program. The parents and caregivers were asked to rank these attitudes and behaviors from eight to one with eight being the highest observed improvement. The parents and caregivers ranked the development and improvement of their child's interpersonal skills and relationships as the highest ranked improvement with a mean score of 7.05. In addition, 65.2% of the respondents observed improvements regarding greater independence, self-direction, self-reliance and confidence. The observation regarding a greater interest in their child regarding career preparation was mentioned by 47.8% of the parents and caregivers.

In conclusion, through the surveys and the focus group discussions with school-based mentors, work-based mentors, and parents/caregivers the opportunity to explore a career area of interest, the development and improvement of interpersonal skills, the gaining of self-confidence, self-reliance, self-discipline, independence, and applying skills to real world situations were the highest benefits experienced and skills developed by the WISE Program. Further analysis of the WISE Alumni focus group discussion and
the analysis of student journal entries, confirms that those benefits experienced and skills developed were also experienced and expressed by the WISE Alumni.

5. **What were the satisfaction levels achieved by the WISE Program from the perspective of its participants?**

All of the participants in the WISE Program from the student participants to their parents and caregivers have indicated a great deal of satisfaction with the program. All stakeholders were asked for their degree of satisfaction with the Program which was based on a 3-point Likert scale of Satisfied (3), Satisfied, but have recommendations (2), and Not Satisfied (1).

Sixty-one WISE Alumni responded to this question with 78.7% indicating their satisfaction with the program, while 19.7% indicated program satisfaction but had recommendations to improve the program. A mere 1.6% of the respondents were not satisfied with the program. A total of 98.4% of WISE Alumni expressed an overall satisfaction with the program. The $M$ for this question was at 2.76 with a $SD$ of .47 showed a greater tendency of satisfaction without any recommendations for improvement in the program. The standard deviation of .47 shows that the central tendency is stronger and therefore more accurate.

During the focus group discussion, the WISE Alumni confirmed their satisfaction with the program. When asked if the program had helped them in any way, they all answered affirmatively and agreed that the program made them more responsible, as well as putting them on the right path toward their future. They also were in agreement to recommend WISE to other students. In fact, they warned students considering this program that there is a great deal of work, and it is not just simply getting out of English
and social studies during the second semester of their senior year. In spite of the greater challenges and workload that WISE requires, in comparison to the traditional program, WISE Alumni said they would participate in WISE again. The common phrase throughout the focus group discussions and the excerpts from student journals was that it was the most worthwhile experience they had in high school.

Forty-two school-based mentors responded to this question with 71.4% indicating their satisfaction with the program, while 23.8% indicated program satisfaction but had recommendations to improve the program. School-based mentors, who were not satisfied with the program, consisted of 4.8% of the respondents. A total of 95.2% of the school-based mentors expressed an overall satisfaction with the program. The M for this question was at 2.71 with a SD of .51 showed a greater tendency of satisfaction without any recommendations for improvement in the program. The standard deviation of .51 shows that the central tendency is stronger and therefore more accurate.

The focus group discussion with the school-based mentors confirmed these high satisfaction rates. The teachers felt and enjoyed the one-on-one contact with students, the sense of appreciation from the students, and seeing the maturation process unfold “before their eyes”. By participating in the WISE Program, the school-based mentors were able to experience these factors that rarely are experienced in the conventional classroom dynamic.

Thirty-three work-based mentors responded to this question with 75% indicating their satisfaction with the program, while 21.8% indicated program satisfaction but had recommendations to improve the program. Work-based mentors, who were not satisfied with the program, consisted of 3.2% of the respondents. A total of 96.8% of the work-
based mentors expressed an overall satisfaction with the program. The \( M \) for this question was at 2.72 with a SD of .53 showed a tendency of greater satisfaction without any recommendations for improvement in the program. The standard deviation of .53 shows that the central tendency is stronger and therefore more accurate.

An additional question was asked of work-based mentors regarding their willingness to participate in the program the following year. This question was asked on 3-point Likert scale of Definitely Participate (3), Probably Participate (2), and Not Participate (1). Of the thirty-three work-based mentor respondents, 76.7% indicated that they would definitely participate in the program, while 13.3% indicated they would probably participate. A total of 10% of the work-based mentor respondents indicated that they would not participate in the program. Work-based mentors expressed an overall willingness to participate in the WISE Program for the next academic school year at a 90% participation rate. The \( M \) for this question was at a 2.67 participation rate and a SD .66. The standard deviation of .66 shows that the central tendency is stronger and therefore more accurate.

Although not unanimous, the work-based mentors focus group discussion expressed satisfaction with the Program. These mentors felt that WISE was an opportunity to help participate in the education of students by sharing their experience and expertise in a career area of student interest. They discussed the mutual benefit of the experience by not only sharing their expertise, but also being able to refocus attention on their own career and gaining a greater appreciation for what they do. Similar to the experience of the school-based mentors, the work-based mentors expressed the
satisfaction of experiencing the maturation process in the student as they worked at the site.

Twenty-six parents and caregivers responded to this question with 84.6% indicating their satisfaction with the program, while 17.4% indicated program satisfaction but had recommendations to improve the program. None of the parents and caregivers indicated that they were not satisfied with the program, consisted at 0% of the respondents. A total of 100% of the parents and caregivers expressed an overall satisfaction with the program. The M for this question was at 2.85 with a SD of .39 showed a greater satisfaction without any recommendations for improvement in the program. The standard deviation of .39 showed that the central tendency is stronger and therefore more accurate.

The parents' and caregivers' focus group confirmed their satisfaction with the program, which aligned with the survey questionnaire data. They stressed that it was such a worthwhile experience and helped cured "senioritis". In addition, they noted that the overall maturation process, becoming more responsible, and focusing students on a possible career path emphasized their high degree of satisfaction with the WISE Program. All parent and caregiver focus group participants encourage other parents to have their children elect to take the WISE Program. (See Appendix A, Chart D, page 188)

6. What recommendations can be made to the WISE Program in order to improve the effectiveness of the program for its student participants?

Although all stakeholders were satisfied with the WISE Program, they were very forthright about making recommendations to help improve the effectiveness of the program for its student participants. In addition, recommendations were also made to
provide a greater opportunity for more students to become involved in WISE, so they would be able to gain the benefit of its unique and valuable experience.

The WISE Alumni, who were closest to the experience, made some positive and thought provoking recommendations. They emphasized that the weekly seminar (WISE Wednesdays) could be improved by involving students in the program planning. Some suggestions regarding the WISE Wednesdays included the presentation of special skills needed in the real world, guest speakers, and scheduling seminars every other week rather than weekly. Students felt strongly about meeting regularly with their school-based mentors, and their school-based mentors visiting them at the work sites to monitor their progress. They also recommended that the work-based mentors become more involved in their students' final presentations, and that WISE should be offered for a greater length of time than just the final semester of the senior year. Finally, students suggested that the school district provide transportation to the internship sites in order to broaden the opportunity for students who could not provide for their own transportation. In the focus group discussion with WISE Alumni, students reiterated some of the same recommendations. However, they were particularly vocal about starting early to locate the internship site and to link with a school-based mentor.

There were remarkable similarities between the school-based mentor recommendations and the student recommendations. School-based mentors felt that more time was needed in their schedule to effectively mentor students and visit the internship sites collaborating with the work-based mentors. In addition to recommending greater clarity in the curriculum, they suggested that the length of time of the internship be extended by beginning earlier, perhaps in the summer prior to the senior year. The focus
group discussion for school-based mentors confirmed these recommendations; however, some discussion focused on the academic, emotional, and social readiness levels of students to participate in WISE. There was discussion and disagreement among the mentors regarding the use of a screening process for students prior to entry into WISE.

The work-based mentors' recommendations continued the basic theme of developing closer ties with the school-based mentors through more visitations, as well as increasing the length of time of student participation in the internship by starting the internship earlier in the year. The work-based mentors expressed the need for more flexibility in the time students spent at the work site, including the option for doing their presentations at the internship site rather than at the school. Some work-based mentors felt that the quality of the research papers was disappointing, and students should be given more orientation and preparation prior to the internship. The focus group discussion for work-based mentors confirmed most of these recommendations, but as in the school-based mentors' discussion, some of the work-based mentors disagreed about developing a screening process for students' participation.

Parents and caregivers were very positive in their praise of the program. They felt that the program was such a positive learning experience for their children that they could not offer any recommendations to improve upon it. However, the issue of time and starting the program earlier in a student's high school career also became a predominant theme. The focus group discussion participants stressed the need to provide greater publicity for the program in order to plant the seeds earlier in a student's high school career. The parents and caregivers offered a recommendation to have the final presentation in the WISE Program in the tenth and eleventh grade English classes as a form of dress rehearsal prior to the actual evaluative presentation. This would serve a
dual purpose of additional practice for the WISE student, and provide the publicity
needed for the Program to students in the lower grades. In addition, WISE Alumni
should be involved in the recruitment process for the Program when students register for
courses for the upcoming school year.

Conclusions

The WISE Program is about decision-making, the final decision that a student
makes from his/her high school years to the future after high school in post-secondary
education and/or the world of work. Students pursue WISE based upon their interest in
particular careers or their uncertainty about their futures. Through the data collected by
questionnaires, telephone interviews, focus group discussions and analysis of student
journal entries, it can be concluded that the WISE Program has had a strong influence on
the selection of career choices and/or college majors of its student participants in
comparison to students who did not elect to participate in the Program.

According to 77.8% of the respondents in the questionnaire, the WISE Program
influenced their decision in selecting a career and/or college major. The Program either
confirmed the decision, or provided information and experience about a particular career
that caused them not to select that career. This response was supported throughout the
focus group discussions with WISE Alumni and the analysis of student journal entries.

According to 34.5% of the students who did not participate in the WISE Program,
they selected a career and/or college major based on their high school experience. In
addition, these non-participating students indicated that at a rate of 55.2% that they were
very definite about what career and/or college major they planned on pursuing, while
24.1% were somewhat definite about their choice. Even though these students did not have the benefit of experiencing the WISE Program, it appears that many of the other career exploration and development activities offered at Walter Panas High School provided students with a basis to make a decision regarding their futures.

According to all of the stakeholders in the WISE Program, the goals of the program have been achieved in varying degrees depending on their individual perspective. The information collected and the internship experience helped students make a more informed decision about their future. More importantly, the stakeholders came to the realization that besides students being able to apply their skills outside the traditional classroom, students experienced a sense of independence and self-confidence. In addition, students had the opportunity to develop and improve their interpersonal skills and to establish new, positive and productive relationships with adults in the school and business community.

It also can be concluded that the WISE Program contains the basic tenets outlined in the School-to-Work reform effort. Students are participating in school-based learning, work-based learning, and connecting activities. The program participation is not restricted and open to all students across the academic spectrum. In addition, the standards established by the New York State Education Department regarding Career Development and Occupational Studies are career awareness and development, integrated learning and career majors. The WISE Program at the commencement level is addressing these standards.

But WISE is more than just beneficial for students. Through the interactive relationships generated by the Program, school-based mentors and work-based mentors
benefited from their participation. They were able to get to know students and adolescents from different perspectives. The relationships became more adult-to-adult rather than student to teacher or adult to child. In their mentoring roles, teachers gained an appreciation of being able to focus on the needs of one student, making a difference in their lives; work-based mentors changed previously conceived opinions about high school students in teaching about the various aspects of their career. School-based mentors learned from students about their project or particular area of interest, while work-based mentors gained a new appreciation for their career by working with students. Finally, both school-based mentors and work-based mentors cited the excitement in seeing students grow and mature into young adults before their very eyes.

Parents and caregivers hold the unique perspective of observing changes in their child that are not so clearly viewed from a school and/or work-based setting. It can be concluded that parents and caregivers were overwhelming in support of the WISE Program, endorsed its continuation and recommended participation by all students. Parents observed an improvement in their child’s interpersonal skills, self-confidence and self-esteem. Parents and caregivers also mentioned the value of the experience that their children received regarding a future career and/or college major. This experience helped them and their students make a more focused informed decision about their future, thereby saving valuable time and financial resources.

Through the review of related literature, the WISE Program confirms and supports what research says about learning, workplace competencies, and effective programs for the high senior year and college-bound students. The program confirms the value of experiential learning in the delivery of academic instruction, and the shift to “student as
worker and teacher as coach” as cited by Parnell. The emphasis of workplace competencies outlined in the SCANS Report for the future workforce is consistently reinforced by participation in the WISE Program, especially the development of interpersonal skills. Participation in the WISE Program provides benefits to college-bound students, as cited by Bailey and Merritt, through authentic learning and career exploration that helps them define and understand their personal goals and aspirations. The credibility of the WISE Program is supported by the recent report released by the National Commission on the High School Senior Year. The report recommended that high school seniors are better prepared for the demands of life after high school through participation in structured internships under the mentorship of a faculty member that culminates with a final exhibition or presentation.

Although it can be concluded that the WISE Program is a “win-win” opportunity not only for students but for all its stakeholders, the conclusions from this study were determined through a combination of survey data, telephone interviews, focus group discussions, and analysis of student journal entries. The data collected from the sample population yields the following recommendations for program improvement:

1. The information communicated to school-based mentors and work-based mentors need to be clear and definitive. There needs to be on-going dialogue with the program coordinator, school-based mentors, and in particular, the work-based mentors. This communication could be enhanced with periodic meetings with all stakeholders prior to and during the internship experience. In addition, the WISE Website should be utilized to assist in the facilitation of better communication between the school community and business community.
2. The coordination of WISE and the development of internship sites needs to be addressed. Program coordination is vital to continue the depth, growth, and vitality of the program. As the program expands, this issue becomes even more critical. The coordinator serves as a contact with the business community, matches student interest with an internship site, and monitors student progress at the internship site. Currently, the English and social studies teachers who are assigned the WISE teaching responsibilities coordinate the program. However, it is very difficult to provide these services effectively with the time constraints of teaching other courses and with the responsibility of mentoring six students in the WISE classes. It is recommended that a part-time coordinator be hired to handle the key areas of program coordination, business community contact, locating internship sites, and monitoring student progress at the site. In lieu of establishing another position, a guidance counselor with a reduced load could assume the coordination tasks. If the budget is limited, one of the current coordinators could be released from one period of teaching or supervision for the entire year to coordinate the activities of the Program.

Another avenue may be to contact SCORE (Senior Citizens of Retired Executives), an organization of retired business professionals in the area, and ask for a volunteer to coordinate the WISE Program, or review the current role, duties and responsibilities of the Career and College Aide and to assign the aide to assist in providing coordinator services.

3. Students need to be visited at the internship site frequently by school-based mentors. These visitations improve communication between the school and the work-based mentors. Currently, the school-based mentors are unpaid volunteers, who teach a
full schedule with a supervisory duty. School-based mentors usually meet student mentees after school, during lunch, or the teaching preparation period. One of the prime areas of concern that school-based mentors addressed in this study was the time constraints that do not allow school-based mentors to visit the site as frequently, as well as maintaining a meeting schedule with their student mentee. A solution to this issue of time constraints could be to relieve school-based mentors from their supervisory duty assignment during their mentee’s internship experience. If school management and safety is compromised through this recommendation, school-based mentors should be relieved periodically during the internship experience through a prearranged schedule with building administration.

4. Concerns regarding the weekly seminars, WISE Wednesdays, were raised in particular with the organization and curriculum. In order to address this issue, a curriculum review and mapping by the English and social studies teachers in the WISE Program is recommended to analyze student outcomes that the seminar hopes to achieve. It is also recommended that students become part of the planning process for the weekly seminar through a representative committee and a survey of topics of interest they wish to address. The building administration should informally observe the weekly seminars and provide input in the process of curriculum review and mapping.

5. The issue of journal writing was raised by all stakeholders in the WISE Program. The issues ranged from the frequency of recording entries to the quality of writing. Journal writing is a vital part of the WISE Program. It provides students a moment to reflect on their experiences and provides them a metacognitive feedback to share with themselves and their mentors. Journal writing should still be maintained as an
integral part of the WISE Program, because it provides source information for a student's research paper and a foundation for the presentation. The coordinators should determine the frequency of recording these entries with input from students and their mentors; however, it must be continued. The quality of writing should be carefully addressed and determined if it is a systemic issue or a series of isolated incidents. The English and social studies teachers in the WISE Program should review the English Language Standards outlined by the New York State Education Department, and identify the standards that are met by journal writing. During the first semester of the WISE Program, a review and mapping of the curriculum should take place and address the concerns of the quality of student writing.

6. The final assessment by students in the WISE Presentation is their public presentation to a panel of evaluators that is comprised of their peers and members of the school and business community. These presentations need to be scheduled at a time that their work-based mentors and parents or caregivers are able to attend. The presentation is a point of celebration and the final step of transitioning for the student participants.

7. In order for the WISE Program to continue making a positive influence for all students, better communication and publicity about the program needs to be addressed to reach the greater student population. It is recommended that prior to a student's final presentation before the panel of evaluators, students should practice their presentation to tenth and eleventh graders in their English classes. This would add a promotional aspect for WISE recruiting where WISE students could share their joys and successes, and extol the benefits of participating in the WISE Program. This practice session will have a two-fold purpose: it will the WISE student bring clarity and polish to his/her presentation,
and it will excite a student population base to help sustain the Program and benefit more students as they approach their senior year. Whenever possible, WISE Alumni should be invited back to speak with current WISE students and other students about their experience in WISE and how it has affected their future. Program coordinators should solicit the aid of parents of WISE Alumni to promote the program to parents of students in the eleventh grade prior to course selections for senior year.

8. The reasons mentioned by students who did not participate in the WISE Program need to be addressed. Since WISE provides students with so many benefits and contributes to their bank of knowledge to make a more informed and focused decision about their future, more students should be given the opportunity to participate in the program without logistical and procedural issues hampering their request to be part of the WISE Program. Program coordinators, guidance counselors, and administrators need to address the issues that prevent seniors from participating in the WISE Program. WISE is scheduled for the last two periods of the school day. If at all possible, the building administration should avoid the scheduling of any twelfth grade courses during these two periods. This will reduce scheduling conflicts as a barrier for students not being able to participate in WISE. Program coordinators should continually inform guidance counselors about the program and stress the fact that the program is for all students across the academic spectrum. The college-bound student or students in Advanced Placement courses should not be excluded or advised against participation. The program benefits all students. Every student must make a choice about the future, and the program merely confirms that choice or provides an experience that enables students to evaluate and change their choice prior to graduation without expending valuable time and financial
resources. If some students are unable to schedule WISE, a shorter version of the program may be developed to provide seniors with this experience prior to high school graduation.

9. Several concerns have been expressed regarding when the program should begin. Many of the stakeholders feel that the program is so beneficial and vital that the program should start earlier in a student’s education, because senior year is sometimes too late. Although there is merit to this concern, the data collected does not support an earlier start. It has been suggested that WISE begin in eleventh grade, but this would be difficult to implement. Eleventh grade is quite challenging with mandatory course requirements and testing, that this is not a feasible option. It would be beneficial for students to have instruction on a contextualized basis across the curriculum to bring relevancy to their learning as a basis to select WISE in their senior year. If an eleventh grader selects WISE for their senior year, the student could begin the internship during the summer prior to the beginning of the senior year. Another course that may be explored for those students, who cannot schedule WISE, is to offer WISE as part of the District’s Summer Enrichment Program. Due to some of the experiences provided in the education continuum in the District, students are exposed to various programs and projects that include career awareness and development. Every student in the middle school must take a course entitled Home and Career Skills, which addresses the issue of career awareness and exploration. As a result, many students have an understanding about what careers they have interest.

10. Students in the WISE Program have been enthusiastically received by the business community. The work-based mentors are generally pleased with the students.
The data collected suggested high praise for their motivation, responsibility, and decorum while at the internship site. The criticisms regarding students have been sporadic, however, there is cause for concern because students in the WISE Program are the ambassadors of the Program. Both positive and negative experiences by the business community reflect on the image of the WISE Program. The suggestion to have a screening mechanism has long been an issue to be addressed. The WISE Program is an inclusive program. It must continue to be inclusive; however, the concern for the long-term stability and sustainability of the program is a serious one. It is this researcher’s recommendation that a limited screening process for entry into the program may be permissible. The criteria for program entry should be carefully devised and developed on a collaborative basis with program coordinators, guidance counselors, building administration, WISE Alumni, mentors, and parents or caregivers. In fact, the WISE Program should consider re-instituting the task force that existed when WISE was first developed six years ago. The task force acts as the coordinators' advisory council where all issues and concerns may be addressed and solved in a collaborative manner.

In conclusion, the WISE Program has been successful, but it has not reached its full potential at Walter Panas High School. The WISE Program and Walter Panas High School have seen many changes in leadership over the past six years. The original coordinators and building administration that brought the WISE Program to the school are no longer employed in the District. Nevertheless, the Program thrives and exists because of the dedication of its coordinators and school-based mentors who understand the strong influence it has on its student participants. The Program has not only influenced the lives of students, but it has changed teacher and community perceptions
about students. It has connected the schools with the community, and has challenged the faculty with new instructional practices. For this researcher, the Program has fulfilled a life-long philosophy of education that values the creation of relevancy in instruction by connecting what students learn in school to the real world, thereby creating meaning and increasing student achievement.

**Recommendations for Further Research**

Based on the finding of this study and the review of the literature on internship programs and School-to-Work, further research is suggested in the following areas:

1. An analysis of the roles mentors (school-based and work-based) in the success of students in an internship program.

2. A study to determine the relationship of the WISE Program meeting the components of authentic instruction and learning.

3. A study comparing and contrasting the benefits of the WISE Program based on student gender and ethnicity.

4. A study to determine the value of internship programs for students that are college-bound.

5. A study to determine the sustainability of School-to-Work programs in schools now that the funding for programs has ceased.

6. A study to determine the correlation of the New York State Career Development and Occupational Studies Standards with the standards outlined in the six other major study areas.
7. A study to determine the reasons for the opposition to School-to Work Transition by various conservative groups.

8. A study to determine the relationship of the WISE Program in meeting the New York State Learning Standards and requirements other professional agencies.

9. A longitudinal study that tracks WISE participants into their careers and looks for such variables as turnover and job satisfaction.
References


Appendix A

Charts of Essential Information
CHART A

Impact of WISE Program on Student Decision Making

- Developed New Skills
- Presently In Career and/or College Major

CHART B

Impact of Other School Programs on Non-Participating Students Decision-Making

- Technology
- Guidance Counseling
## CHART C

**Frequency of Goals Achieved**

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Student</th>
<th>School-Based Mentor</th>
<th>Work-Based Mentor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Career Exploration and Development</td>
<td>Develop Independence and Confidence</td>
<td>Career Exploration and Development</td>
</tr>
<tr>
<td>2nd</td>
<td>Apply Knowledge outside classroom</td>
<td>Career Exploration and Development</td>
<td>Develop Independence and Confidence</td>
</tr>
<tr>
<td>3rd</td>
<td>Develop Independence and Confidence</td>
<td>Improve Interpersonal Skills</td>
<td>Apply Knowledge outside classroom</td>
</tr>
<tr>
<td>4th</td>
<td>Improve Interpersonal Skills</td>
<td></td>
<td>Improve Interpersonal Skills</td>
</tr>
<tr>
<td>5th</td>
<td>Use of Community Resources</td>
<td>Use of Community Resources</td>
<td>Use of Community Resources</td>
</tr>
</tbody>
</table>

## CHART D

**Satisfaction Levels of Stakeholders in WISE Program**

![Bar chart showing satisfaction levels of different stakeholders in the WISE Program.](chart-d)
CHART E

Reasons for Not Participating in WISE

- Program was not geared for college-bound students
- Participating
Appendix B

WISE Alumni Correspondence and Evaluation Form
Dear WISE Alumni:

My name is Ernest J. Piermarini, and I am requesting your assistance. I am a graduate student in the Executive Doctoral program in the College of Education and Human Services at Seton Hall University, and the Assistant Superintendent for Human Resources in the Lakeland Central School District. As part of my doctoral degree program, I am conducting an evaluative study of the WISE program at Walter Panas High School. The goal of the study is to determine the effectiveness of the program by determining its strengths and weaknesses, thereby, improving the program and designing it for possible replication for other schools. You were key participants in the WISE program, and your perceptions, thoughts, and opinions are vital for this study. It is important for us to know how the WISE program has affected and guided your decisions regarding your future career and/or college major.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the office of Grants and Research Services. The telephone number of the Office is (973) 275-2974.

Your participation in this study is strictly voluntary. Therefore, your refusal to participate will not affect your status in the Lakeland Central School District and/or affiliation and participation in the WISE program. Please complete the enclosed survey, as soon as possible and return it in the enclosed self-addressed, stamped envelope. The survey contains approximately 15 questions that will ask you to rank certain statements, as well as respond to several questions asking about your experiences and opinions regarding the WISE program. The results of this survey will be confidential, and you will not be personally identified in any way in the study. The estimated time of completion for this survey is fifteen minutes. Your completion and return of the survey indicates your understanding and willingness to participate.

After the surveys are returned, I may be calling you at a later date to participate in a focus group discussion that will last no longer than forty-five minutes. The focus group discussion will occur sometime during the month of April, and will be conducted in the Community Room at the John C. Hart Library in Shrub Oak, NY. Your participation in this focus group is strictly voluntary, and is not connected with your participation in completing this survey questionnaire.

If you have questions regarding this request, I may be reached in the day at 914-245-5402 or in the evenings at 914-265-2082. Thank you for your assistance in this study.

Sincerely,

Ernest J. Piermarini
Doctoral Candidate
WISE PROGRAM

WISE ALUMNI EVALUATION FORM

As part of my doctoral studies, I am conducting an evaluation of the WISE Program. You were a key participant in the program, and I appreciate your assistance in helping me evaluate the program by answering the following questions. If additional space is needed for your responses, please feel free to use the back of this form. Thank you for your participation.

1. What year were you a participant in the WISE Program?


2. Please rank the statements listed below from 1 to 5 with 5 being the most important statement that made you decide to participate in the WISE Program. Place your ranking on the line to the left of the statement.

a) _____ An opportunity for me to do career exploration and development (learning the specifics of a particular career choice).

b) _____ An opportunity for me to apply my skills and knowledge outside the classroom in an area of special interest.

c) _____ An opportunity for me to develop independence, self-direction, self-reliance, and confidence.

d) _____ An opportunity for me to develop and improve interpersonal skills and relationships.

e) _____ An opportunity for me to learn about and use community resources as part of my education.

3. Briefly describe your WISE Project. (What did you do? Where did you do it?)

4. Why did you decide to do the particular project that you chose? (Check the statement or statements that most accurately describes your experience. You may check more than one statement if more that one statement describes your experience.)

_____ To find out whether I wanted a career in this field
To get experience that would help me get a job after high school.

To improve myself in that area

To make a difference in my school or my community

A friend was doing a similar project

Something I enjoyed doing, even though I didn’t expect to make it my career

My mentor suggested it.

A teacher suggested it.

Another reason. (Please indicate what the reason was.)

5. Please rate the following statements to the extent to which you agree or disagree regarding the WISE program. Use the following code: 5—Strongly Agree; 4—Agree; 3 Disagree; 2—Strongly Disagree; or 1—Does Not Apply.

a) My WISE experience helped me decide on a career and/or college major.

b) I learned about my own strengths/weaknesses.

c) I learned about the world of work.

d) I developed new skills.

e) I benefited from a greater degree of independence.

f) I took more responsibility for my own learning.

g) I became more interested in my school work.

h) My school-based mentor was very helpful to me.

i) My work-based mentor was very helpful to me.

j) What I learned could not have been learned through my regular classes.
6. Are you currently pursuing a career or selected a college major based on your experience in WISE?  _____YES  _____NO

7. What is your career choice and/ or college major?

8. In your opinion, what was the best part of the WISE experience?

9. What was the most challenging part of your WISE experience?

10. Why did you choose your school-based mentor?

11. Specifically, how did your school-based mentor assist you with your project?

12. How did you select your work-based learning site?

13. What was the occupation of your work-based mentor?

14. Specifically, how did this person assist you with your project?

15. Based on your experience with the WISE Program, were you:

    _____Satisfied  _____Satisfied but have recommendations  _____Not satisfied

What recommendations, if any, would you offer to improve the overall WISE Program?

Thank you for your time and effort in completing this survey.

PLEASE FEEL FREE TO MAKE ANY ADDITIONAL COMMENTS ON THE BACK OF THIS FORM.
Appendix C

Non-Participating Student Correspondence and Evaluation Form
Dear Walter Panas High School Alumni:

My name is Ernest J. Piermarini, and I am requesting your assistance. I am a graduate student in the Executive Doctoral program in the College of Education and Human Services at Seton Hall University. As part of my doctoral degree program, I am conducting an evaluative study of the WISE program at Walter Panas High School. The goal of the study is to determine the effectiveness of the program by determining its strengths and weaknesses, thereby, improving the program and designing it for possible replication for other schools.

The WISE program is a high school internship conducted in the second semester of the senior year in high school. Even though you were not a participant in the WISE program during high school, your perceptions, thoughts, and opinions are vital for this study. It is important for us to know how Walter Panas High School prepared you in guiding your decisions regarding your future career and/or college major without being a participant in the WISE program.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the office of Grants and Research Services. The telephone number of the Office is (973) 275-2974.

Your participation in this study is strictly voluntary. Please complete the enclosed survey, as soon as possible and return it in the enclosed self-addressed, stamped envelope. The survey contains approximately 13 questions that will ask you to rank certain statements, as well as respond to several questions asking about your experiences and opinions regarding your high school years. The results of this survey will be confidential, and you will not be personally identified in any way in the study. The estimated time of completion for this survey is fifteen minutes. Your completion and return of the survey indicates your understanding and willingness to participate.

If you have questions regarding this request, I may be reached in the day at 914-245-5402 or in the evenings at 914-265-2082. Thank you for your assistance in this study.

Sincerely,

Ernest J. Piermarini
Doctoral Candidate
WISE PROGRAM

· NON-PARTICIPATING STUDENT EVALUATION FORM

As part of my doctoral studies, I am conducting an evaluation of the WISE Program. Even though you were not a participant in the program, your assistance is vital in helping me evaluate the program. Please answer the following questions. If additional space is needed for your responses, please feel free to use the back of this form. Thank you for your participation.

1. What year did you graduate from Walter Panas High School?


2. What did you do after you graduated from Walter Panas High School

a) _____ Attended college full-time (Name the college)______________________________

b) _____ Went to work and attend college part-time.

   • Name the college:_______________________________________________________

   • Identify your job title:__________________________________________________

c) _____ Went directly to work. (Identify job title)______________________________

d) _____ Went in to the military (Name branch of service)______________________

e) _____ Other: ___________________________________________________________________

3. For college attendees, please answer the following questions:

a) Did you graduate from college? Yes ____ No ____ What year did you graduate? ______

b) What is your degree/college major? ___________degree ___________major

   c) Are you employed in the career you prepared for in college? Yes ____ No ____

   If you answered NO, what are you doing now? ____________________________________
5. Please answer Yes or No from the following list of activities that you may or may not have participated in during your high school career.

a) Attended a Career or Job Fair  
   ____ YES  ____ NO

b) Employers came to speak at school  
   ____ YES  ____ NO

c) Went on a field trip to a work site  
   ____ YES  ____ NO

d) Followed an employee at work on the job  
   ____ YES  ____ NO

e) Completed an interest inventory  
   ____ YES  ____ NO

f) Used career exploration software  
   ____ YES  ____ NO

g) Participated in an internship  
   ____ YES  ____ NO

h) Used the services of the Career Center  
   ____ YES  ____ NO

i) Was advised about careers by my Guidance Counselor  
   ____ YES  ____ NO

6. Are you currently pursuing a career or selected a college major based on your experience in high school?  ____ YES  ____ NO

7. What is your career choice or college major?  

8. How definite are you about your career choice/college major?
   ____ very definite  ____ somewhat definite  ____ not sure at all

Thank you for your time and effort in completing this survey.

PLEASE FEEL FREE TO MAKE ANY ADDITIONAL COMMENTS ON THE BACK OF THIS FORM.
Appendix D

School-Based Mentor Correspondence and Evaluation Form
Dear School-Based Mentor:

Thank you for your many years of participation in WISE Program at Walter Panas High School. My name is Ernest J. Piermarini, and I am requesting your assistance. I am a graduate student in the Executive Doctoral program in the College of Education and Human Services at Seton Hall University. As part of my doctoral degree program, I am conducting an evaluative study of the WISE program in the Lakeland Central School District. The goal of the study is to determine the effectiveness of the program by determining its strengths and weaknesses, thereby, improving the program and designing it for possible replication for other schools. You are a key stakeholder in the WISE program, and your perceptions, thoughts, and opinions are invaluable for this study.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject’s privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the office of Grants and Research Services. The telephone number of the Office is (973) 275-2974.

Your participation in this study is strictly voluntary. Please complete the enclosed survey, as soon as possible and return it in the enclosed self-addressed, stamped envelope. The survey contains approximately 13 questions that will ask you to rank certain statements, as well as respond to several questions asking about your experiences and opinions regarding the WISE program. The results of this survey will be confidential, and you will not be personally identified in any way in the study. The estimated time of completion for this survey is fifteen minutes. Your completion and return of the survey indicates your understanding and willingness to participate. If you do not wish to participate in this study, your employment status will not be negatively affected.

After the surveys are returned, I may be calling you at a later date to participate in a focus group discussion that will last no longer than forty-five minutes. The focus group discussion will occur sometime during the month of April, and will be conducted in the Community Room at the John C. Hart Library in Shrub Oak, NY. Your participation in this focus group is strictly voluntary, and is not connected with your participation in completing this survey questionnaire.

If you have questions regarding this request, I may be reached in the day at 914-245-5402 or in the evenings at 914-265-2082. Thank you for your assistance in this study.

Sincerely,

Ernest J. Piermarini
Doctoral Candidate
WISE PROGRAM

SCHOOL-BASED MENTOR EVALUATION FORM

As part of my doctoral studies, I am conducting an evaluation of the WISE Program. You play a key role in the program, and I appreciate your assistance in helping me evaluate the program by answering the following questions. If additional space is needed for your responses, please feel free to use the back of this form. Thank you for your participation.

1. How many students did you mentor in the past four school years of the WISE Program?


2. The goals of the WISE Program are listed below. Please rank each goal from 1 to 5 with 5 being the highest frequency of success your student(s) met these goals. Place your ranking on the line next to each statement.
   a) ______ An opportunity for career exploration and development (learning the specifics of a particular career choice).
   b) ______ An opportunity to apply their skills and knowledge outside the classroom in an area of special interest.
   c) ______ An opportunity to develop independence, self-direction, self-reliance, and confidence.
   d) ______ An opportunity to develop and improve interpersonal skills and relationships.
   e) ______ An opportunity to learn about and use community resources as an extension of traditional education.

3. How did your experience as a WISE mentor compare to your experience as a classroom teacher?
4. The purpose of the WISE Program is to provide a more meaningful, engaging, and useful conclusion to the senior year than provided by the conventional curriculum. Please comment on the value of this program for seniors during their final semester as students in high school.

5. In what ways do you think your student(s) benefited from their experience in WISE? Please rank the following statements from 1 to 7 with 7 being the highest benefit experienced. Place your ranking on the line next to each statement:

- Learned about a particular topic or issue
- Learned about the world of work
- Explored a particular career possibility
- Took responsibility for their own learning
- Gained confidence
- Learned about the role of technology
- Learned problem solving and decision making skills

6. In what ways did you think your student(s) developed skills from their experience in WISE? Please rank these skills from 1 to 6 with 6 being the highest skill achieved. Place your ranking on the line to the left of the skill.

- Working with adults and peers
- Time Management
- Research skills
- Presentation skills
- Technology skills
- Setting/adjusting goals
7. What was the most positive aspect of being a WISE mentor?

8. What was the most frustrating and/or difficult aspect of being a WISE mentor?

9. Specifically what did you do in your role as a mentor for your student(s)? Please rank each activity from 1 to 6 with 6 being the most frequent activity. Place your ranking on the line to the left of the statement.

_____ Helped them decide what projects to do
_____ Helped them shape their ideas into a more concrete plan
_____ Helped them find written resources
_____ Helped them find human resources
_____ Gave input on their oral presentations
_____ Read their journals

10. Based on your experience with the WISE Program, were you:

_____ Satisfied  _____ Satisfied but have recommendations  _____ Not satisfied

What recommendations, if any, would you offer to improve the overall WISE Program?

Thank you for your time and effort in completing this survey.

PLEASE FEEL FREE TO MAKE ANY ADDITIONAL COMMENTS ON THE BACK OF THIS FORM.
Appendix E

Work-Based Mentor Correspondence and Evaluation Form
Dear Work-Based Mentor:

Thank you for your participation in Lakeland Central School District WISE Program located at Walter Panas High School. My name is Ernest J. Piermarini, and I am requesting your assistance. I am a graduate student in the Executive Doctoral program in the College of Education and Human Services at Seton Hall University. As part of my doctoral degree program, I am conducting an evaluative study of the WISE program in the Lakeland Central School District. The goal of the study is to determine the effectiveness of the WISE program by determining its strengths and weaknesses, thereby, improving the program and designing it for possible replication in other schools. You are a key stakeholder in the WISE program, and your perceptions, thoughts, and opinions are invaluable for this study.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject’s privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the office of Grants and Research Services. The telephone number of the Office is (973) 275-2974.

Your participation in this study is strictly voluntary. Please complete the enclosed survey, as soon as possible and return it in the enclosed self-addressed, stamped envelope. The survey contains approximately 10 questions that will ask you to rank certain statements, as well as respond to several questions asking about your experiences and opinions regarding the WISE program. The results of this survey will be confidential, and you will not be personally identified in any way in the study. The estimated time of completion for this survey is ten minutes. Your completion and return of the survey indicates your understanding and willingness to participate.

After the surveys are returned, I may be calling you at a later date to participate in a focus group discussion that will last no longer than forty-five minutes. The focus group discussion will occur sometime during the month of April, and will be conducted in the Community Room at the John C. Hart Library in Shrub Oak, NY. Your participation in this focus group is strictly voluntary, and is not connected with your participation in completing this survey questionnaire.

If you have questions regarding this request, I may be reached in the day at 914-245-5402 or in the evenings at 914-265-2082. Thank you for your assistance in this study.

Sincerely,

Ernest J. Piermarini
Doctoral Candidate
WISE PROGRAM

WORK-BASED MENTOR EVALUATION FORM

As part of my doctoral studies, I am conducting an evaluation of the WISE Program. You play a key role in the program, and I appreciate your assistance in helping me evaluate the program by answering the following questions. If additional space is needed for your responses, please feel free to use the back of this form. Thank you for your participation.

1. How many students did you mentor at your work site in the past four school years of the WISE Program?


2. The goals of the WISE Program are listed below. Please rank each goal from 1 to 5 with 5 being the highest frequency of success your student(s) met these goals. Place your ranking on the line next to each statement.

a) _____ An opportunity for career exploration and development (learning the specifics of a particular career choice).

b) _____ An opportunity to apply their skills and knowledge outside the classroom in an area of special interest.

c) _____ An opportunity to develop independence, self-direction, self-reliance, and confidence.

d) _____ An opportunity to develop and improve interpersonal skills and relationships.

e) _____ An opportunity to learn about and use community resources as an extension of traditional education.

3. The purpose of the WISE Program is to provide a more meaningful, engaging, and useful conclusion to the senior year than provided by the conventional curriculum. Please comment on the value of this program for seniors during their final semester as students in high school.
4. As a result of their work exploration experiences with your organization, in what ways did the student(s) you supervised benefit? Please rank the following statements from 1 to 7 with 7 being the highest benefit experienced. Place your ranking on the line next to each statement:

______ Developed a better understanding of your field of work
______ Developed a better sense of the world of work
______ Acquired a value of reliability and dependability
______ Improved self-confidence and sense of worth
______ Exhibited greater self-discipline
______ Acquired job or career specific knowledge
______ Learned about specific strengths and areas in need of growth

5. Overall, how satisfied were you with the student(s) you supervised?

______ very satisfied _________ satisfied _________ not satisfied

7. What was the most positive aspect of being a WISE Work-based mentor?

8. What was the most frustrating and/or difficult aspect of being a WISE Work-based mentor?

9. If your organization is involved with the WISE program next year, what is the likelihood that you would participate?

______ Definitely participate _____ Probably participate _______ Will not participate

10. Based on your experience with the WISE Program, were you:

______ Satisfied ______ Satisfied but have recommendations ______ Not satisfied

What recommendations, if any, would you offer to improve the overall WISE Program?

Thank you for your time and effort in completing this survey. PLEASE FEEL FREE TO MAKE ANY ADDITIONAL COMMENTS ON THE BACK OF THIS FORM.
Appendix F

Parent/Caregiver Correspondence and Evaluation Form
Dear Parent/Guardian:

My name is Ernest J. Piermarini, and I am requesting your assistance. I am a graduate student in the Executive Doctoral program in the College of Education and Human Services at Seton Hall University. As part of my doctoral degree program, I am conducting an evaluative study of the WISE program, the high school internship for seniors, in the Lakeland Central School District. The goal of the study is to determine the effectiveness of the program by determining its strengths and weaknesses, thereby, improving the program and designing it for possible replication for other schools. You are a key stakeholder in the WISE program, and your perceptions, thoughts, and opinions are invaluable for this study.

This project has been reviewed and approved by the Seton Hall University Institutional Review Board for Human Subjects Research. The IRB believes that the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights. The Chairperson of the IRB may be reached through the office of Grants and Research Services. The telephone number of the Office is (973) 275-2974.

Your participation in this study is strictly voluntary. Please complete the enclosed survey, as soon as possible and return it in the enclosed self-addressed, stamped envelope. The survey contains approximately 10 questions that will ask you to rank certain statements, as well as respond to several questions asking about your experiences and opinions regarding the WISE program. The results of this survey will be confidential, and you will not be personally identified in any way in the study. The estimated time of completion for this survey is ten minutes. Your completion and return of the survey indicates your understanding and willingness to participate.

After the surveys are returned, I may be calling you at a later date to participate in a focus group discussion that will last no longer than forty-five minutes. The focus group discussion will occur sometime during the month of April, and will be conducted in the Community Room at the John C. Hart Library in Shrub Oak, NY. Your participation in this focus group is strictly voluntary, and is not connected with your participation in completing this survey questionnaire.

If you have questions regarding this request, I may be reached in the day at 914-245-5402 or in the evenings at 914-265-2082. Thank you for your assistance in this study.

Sincerely,

Ernest J. Piermarini
Doctoral Candidate
WISE PROGRAM

PARENT/CAREGIVER EVALUATION FORM

Your completion of this survey is strictly voluntary, and the results will be confidential. You will not be personally identified in any way with the study. I appreciate your assistance in helping me evaluate the program by answering the following questions. If additional space is needed for your responses, please feel free to use the back of this form. Thank you for your participation.

1. In which school year did your son/daughter participate in the WISE Program?

2. As your son/daughter participated in the WISE program, did you notice any changes or improvement in their attitudes and behaviors regarding their future? From the statements below, please rank each statement from 1 to 8 with 8 being the highest frequency of improvement in your son/daughter’s attitudes and behaviors. Place your ranking on the line next to each statement.
   a) _____ My son/daughter showed more interest in school.
   b) _____ My son/daughter showed a better attitude toward learning.
   c) _____ My son/daughter developed independence, self-direction, self-reliance, and confidence.
   d) _____ My son/daughter developed and improved interpersonal skills and relationships.
   e) _____ My son/daughter seemed more interested in preparing for a career.
   f) _____ My son/daughter became more dependable and responsible.
   g) _____ My son/daughter showed an improvement in her/his communication skills.
   h) _____ My son/daughter showed an improvement in her/his research skills.

3. Did your son/daughter talk to you about the WISE Program and her/his internship? Please explain.
4. What aspects of the WISE Program, if any, did you especially like?

5. Overall, how satisfied did your son/daughter appear to be with the WISE Program?
   
   ______ very satisfied    ______ satisfied    ______ not satisfied

6. Would you recommend that other parents encourage their son/daughter to participate in the WISE Program?
   
   ______ Definitely recommend    ______ Probably recommend    ______ Not recommend
   
   Briefly explain your response:

7. Based on your experience with the WISE Program, were you:
   
   ______ Satisfied    ______ Satisfied but have recommendations    ______ Not satisfied
   
   What recommendations, if any, would you offer to improve the overall WISE Program?

Thank you for your time and effort in completing this survey.

PLEASE FEEL FREE TO MAKE ANY ADDITIONAL COMMENTS ON THE BACK OF THIS FORM.
Appendix G

Focus Group Questions
FOCUS GROUP QUESTIONS

WISE ALUMNI QUESTIONS

1. Why did you choose to participate in the WISE Program?

2. What career choice or major are you pursuing?

3. Did WISE Program help you in any way? If so, how? If not, why not?

4. What was your WISE Internship? What did you do? Where did you do it?

5. Were the tasks you performed at your work site challenging?

6. Reflecting back on your WISE experience, would you participate in the experience again? Why or Why not?

7. Was your school-based mentor helpful? How did your mentor help you? Why did you choose your school-based mentor?

8. What was your most memorable experience about the WISE Program?

9. Would you recommend future students to participate in the WISE Program?

SCHOOL-BASED MENTOR

1. How did your experience as a mentor differ from your experience as a classroom teacher? How is it similar?

2. Do you think that the WISE Program provides a more meaningful, engaging, and useful experience for seniors than the conventional classroom experience? Why or Why not?

3. In what ways did your students benefit from their experience in WISE? What skills did they develop through the WISE Program?

4. What was your most positive experience as a mentor?

5. What was your most frustrating or difficult experience as a mentor?

6. What were some of the activities you did to help your students in the WISE Program?

7. What recommendations or suggestions do you have to improve the WISE Program?
8. Overall, how would you rate your experience with the WISE Program on scale of 1 to 5 (one being the lowest, five being the highest)?

**WORK-BASED MENTOR**

1. What value do you see in the WISE Program for seniors?

2. How did your student benefit from the experience at your work-site?

3. What was your most positive experience as a mentor?

4. What was your most frustrating or difficult experience as a mentor?

5. How would you rate your student intern on scale from 1 to 5 (one being the lowest, five being the highest)?

6. Would you recommend your colleagues to become mentors in the WISE Program? Why or Why not?

7. Overall, how would rate your experience with the WISE Program on a scale of 1 to 5 (with 5 being the highest and 1 being the lowest)?

8. What recommendations or suggestions do you have to improve the WISE Program?

**PARENT/CAREGIVER**

1. Did you notice any changes in your child’s attitude towards school? What specific changes did you observe?

2. What did your child discuss with you about their experience in WISE?

3. Do you feel that the WISE Program was a worthwhile experience for your child? Why or Why not?

4. Would you recommend that other parents encourage their child/children to participate in the WISE Program?

5. What did you like best about the WISE Program?

6. What did you like least about the WISE Program?

7. Overall, how would you rate your experience with the WISE Program on scale of 1 to 5 (one being the lowest, five being the highest)?

8. What suggestions do you have to improve the WISE Program?
Appendix H

Other Correspondence
November 1, 1999

Dr. Betty Lou Whitford, Director
NCREST
Box 110
Teachers College
Columbia University
New York, NY 10027

Dear Dr. Whitford:

I spoke to Dr. Fred Frelow last week, and he suggested that I write to you to seek assistance with my doctoral dissertation. I am a graduate student in the Executive Doctoral program at Seton Hall University. As part of my doctoral degree program, I am conducting an evaluative study of the WISE program in the Lakeland Central School District.

Mr. Vic Leviatin, Director of WISE Services, has shared your questionnaire instrument with me. I would like to request your assistance by seeking your permission to use parts of the questionnaire survey you used to evaluate WISE in the New Rochelle School District for the Coalition of Essential Schools Fall Forum in 1995.

If you have questions regarding this request, I may be reached at 914-245-5402 or 914-265-2082.

Thank you in advance for your assistance in this matter.

Sincerely,

Ernest J. Piemarini
Doctoral Student